Subject freight railcar couplers and parts are included within the scope whether finished or unfinished, whether imported individually or with other subject or non-subject parts, whether assembled or unassembled, whether mounted or unmounted, or if joined with non-subject merchandise, such as other non-subject parts or a completed railcar. Finishing includes, but is not limited to, arc washing, welding, grinding, shot blasting, heat treatment, machining, and assembly of various parts. When a subject coupler or subject parts are mounted on or to other non-subject merchandise, such as a railcar, only the coupler or subject parts are covered by the scope.

The finished products covered by the scope of this order meet or exceed the AAR specifications of M–211, ''Foundry and Product Approval Requirements for the Manufacture of Couplers, Coupler Yokes, Knuckles, Follower Blocks, and Coupler Parts'' and/or AAR M–215 ''Coupling Systems,'' or other equivalent domestic or international standards (including any revisions to the standard(s)).

The country of origin for subject couplers and parts thereof, whether fully assembled, unfinished or finished, or attached to a railcar, is the country where the subject coupler parts were cast or forged. Subject merchandise includes coupler parts as defined above that have been further processed or further assembled, including those coupler parts attached to a railcar in third countries. Further processing includes, but is not limited to, arc washing, welding, grinding, shot blasting, heat treatment, painting, coating, priming, machining, and assembly of various parts. The inclusion, attachment, joining, or assembly of non-subject parts with subject parts or couplers either in the country of manufacture of the in-scope product or in a third country does not remove the subject parts or couplers from the scope.

The couplers that are the subject of this order are currently classifiable in the Harmonized Tariff Schedule of the United States (HTSUS) statistical reporting number 8607.30.1000. Unfinished subject merchandise may also enter under HTSUS statistical reporting number 7326.90.8688. Subject merchandise attached to finished railcars may also enter under HTSUS statistical reporting numbers 8606.10.0000, 8606.30.0000, 8606.91.0000, 8606.92.0000, 8606.99.0130, 8606.99.0160, or under subheading 9803.00.50. Subject merchandise may also be imported under HTSUS statistical reporting number 7325.99.5000. These HTSUS subheadings are provided for convenience and customs purposes only; the written description of the scope of this order is dispositive.

[FR Doc. 2023–25201 Filed 11–14–23; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XD521]

New England Fishery Management Council; Public Meeting

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

ACTION: Notice of public meeting.

SUMMARY: The New England Fishery Management Council (Council) is scheduling a meeting of its Scallop Committee via webinar to consider actions affecting New England fisheries in the exclusive economic zone (EEZ). Recommendations from this group will be brought to the full Council for formal consideration and action, if appropriate.

DATES: This meeting will be held on Wednesday, November 29, 2023, at 1 p.m.

ADDRESSES:

Webinar registration URL information: https://attendee.gotowebinar.com/register/4699670473411333979.

Council address: New England Fishery Management Council, 50 Water Street, Mill 2, Newburyport, MA 01950.

FOR FURTHER INFORMATION CONTACT: Cate O'Keefe, Ph.D., Executive Director, New England Fishery Management Council; telephone: (978) 465–0492.

SUPPLEMENTARY INFORMATION:

Agenda

The Committee will review Framework 38 (FW38): review specifications alternatives in FW38 and select final preferred alternatives. FW38 will set specifications including the overfishing limit (OFL), acceptable biological catch/annual catch limit (ABC/ACLs), days-at-sea (DAS), access area allocations for Limited Access (LA) vessels, quota and access area trip allocation to the Limited Access General Category (LAGC) Individual Fishing Quota (IFQ) component, Total Allowable Landings (TAL) for Northern Gulf of Maine (NGOM) management area, a target-TAC for LAGC incidental catch and set-asides for the observer and research programs for fishing year 2024, and default specifications for fishing year 2025. This action also considers increasing VMS ping rates for scallop vessels to improve enforcement in the scallop fishery. Other business will be discussed, if necessary.

Although non-emergency issues not contained on the agenda may come before this Council for discussion, those issues may not be the subject of formal action during this meeting. Council action will be restricted to those issues specifically listed in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take final action to address the emergency. The public also should be aware that the meeting will be recorded. Consistent with 16 U.S.C. 1852, a copy of the recording is available upon request.

Special Accommodations

This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Cate O'Keefe, Ph.D., Executive Director, at (978) 465–0492, at least 5 days prior to the meeting date.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: November 9, 2023.

Rey Israel Marquez,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2023–25225 Filed 11–14–23; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XD361]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the Lutak Dock Replacement Project, Haines Borough, Alaska

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

ACTION: Notice; proposed incidental harassment authorization; request for comments on proposed authorization and possible renewal.

SUMMARY: NMFS has received a request from Haines Borough for authorization to take marine mammals incidental to the Lutak dock replacement project in Lutak, Alaska. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an incidental harassment authorization (IHA) to incidentally take marine mammals during the specified activities. NMFS is also requesting comments on a possible one-time, 1-year renewal that could be issued under certain circumstances and if all

requirements are met, as described in Request for Public Comments at the end of this notice. NMFS will consider public comments prior to making any final decision on the issuance of the requested MMPA authorization and agency responses will be summarized in the final notice of our decision.

DATES: Comments and information must be received no later than December 15, 2023.

ADDRESSES: Comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, NMFS and should be submitted via email to *ITP.cockrell@noaa.gov.* Electronic copies of the application and supporting documents, as well as a list of the references cited in this document, may be obtained online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities.* In case of problems accessing these documents, please call the contact listed above.

Instructions: NMFS is not responsible for comments sent by any other method, to any other address or individual, or received after the end of the comment period. Comments, including all attachments, must not exceed a 25-megabyte file size. All comments received are a part of the public record and will generally be posted online at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities* without change. All personal identifying information (*e.g.,* name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Craig Cockrell, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION:

Background

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

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

National Environmental Policy Act

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

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

We will review all comments submitted in response to this notice prior to concluding our NEPA process or making a final decision on the IHA request.

Summary of Request

On July 10, 2023, NMFS received a request from the Haines Borough for an IHA to take marine mammals incidental to pile driving involving impact, vibratory, and down-the-hole (DTH) drilling to replace the Lutak Dock. Following NMFS' review of the application, Haines Borough submitted a revised version on October 11, 2023. The application was deemed adequate and complete October 16, 2023. Haines Borough's request is for take of six species of marine mammals by Level B harassment and, for a subset of three of these species, Level A harassment. Neither Haines Borough nor NMFS expect serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

Description of Proposed Activity

Overview

The purpose of the project is to replace the dock facility, constructed in 1953, that has reached the end of its 60-year service life and has experienced local structural failures. The Lutak Dock is an important maritime shipping link that is connected by road to the mainland of Alaska and Canada and is an important connection for the Alaska Marine Highway System to many other Alaskan ports. Takes of marine mammals by Level A and Level B harassment are expected to occur due to impact, DTH, and vibratory pile driving and removal. The project would occur in Lutak inlet which is located in Haines Borough in southeast Alaska. It is expected to take up to 234 non-consecutive days to complete the pile driving and removal activities.

Dates and Duration

Construction activities are expected to over a 1-year year period from winter 2023 to winter of 2024. It is expected to take up to 234 non-consecutive days of in water work over a 1-year work window to complete the pile driving activities. Pile driving would be completed intermittently throughout daylight hours. All pile driving is expected to be completed during one phase of construction.

Specific Geographic Region

The project area is in the Haines Borough on the southern shore of Lutak Inlet, at the upper reaches of Lynn Canal in southeast Alaska. Lutak Dock is located approximately 6 kilometers (km) (4 miles (mi)) northwest of downtown Haines. Lutak Inlet is approximately 9 km (6 mi)-long and measures less than 2 km (1 mi) across from shore to shore at its widest point and is about 110 meters (m) (360 feet (ft)) deep at its entrance between Tanani Point and Taiya Point. Depths at the proposed action area are shallower, approximately 8 m (25 ft) to 30 m (100 ft). To the north of the proposed action area, the Ferebee River empties into the Taiyasanka Harbor and then into Lutak Inlet; to the west of the proposed action area, Chilkoot Lake empties into Lutak Inlet

via the Chilkoot River (see Figure 7 in Haines Borough's application).

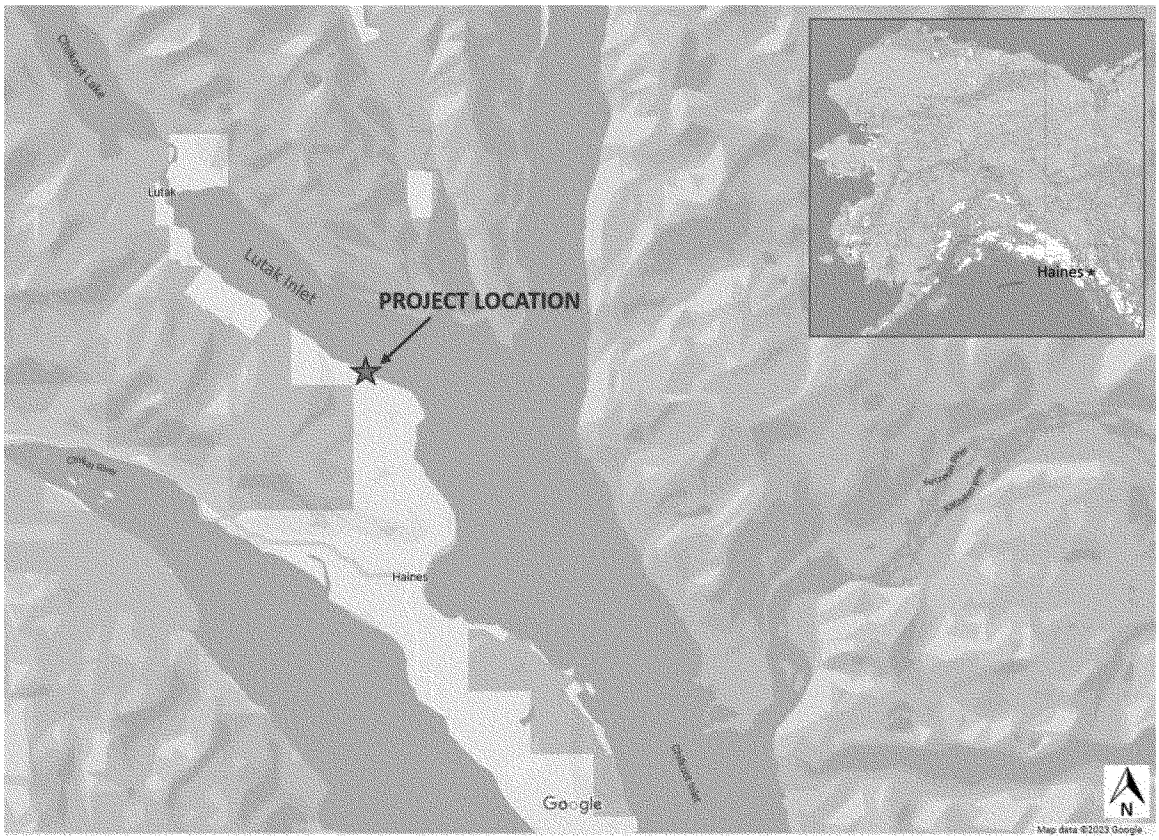

Figure 1. Project location of the Lutak Dock Replacement project

Figure 1. Project location of the Lutak Dock Replacement project

Detailed Description of the Specified Activity

The Haines Borough proposes to encapsulate the existing Lutak Dock structure with a new dock structure of similar design. In-water construction activities associated with the project would include impact pile driving, vibratory pile driving and removal, and DTH installation. Pile removal may also be completed using a ''dead pull'' method, where a pile is tethered to a crane and is removed directly. Impact hammers operate by repeatedly dropping a heavy piston onto a pile to drive the pile into the substrate. Vibratory hammers install piles by vibrating them and allowing the weight of the hammer to push them into the sediment. A DTH hammer is essentially a drill bit that drills through the bedrock using a rotating function like a normal drill, in concert with a hammering mechanism operated by a pneumatic (or sometimes hydraulic) component integrated into the DTH hammer to increase speed of progress through the substrate.

Pile removal would consist of 24 16 inches (in) steel pipe piles (41 centimeters (cm)) that make up the 4 mooring dolphins and 1 24-in (61-cm) steel guide pile. These piles would all be removed using dead pull or vibratory removal methods. Dead pull methods would not have impacts on marine mammals; however, we assume that all pile removal is conducted using vibratory hammer. A template frame would then be welded to 42 36-in (91-cm) temporary piles that is capable of holding 10 permanent piles in each section. The temporary piles would be set in place using vibratory and impact hammers (as needed). The template frame would be used to position the 180 42-in (107-cm) permanent piles across the length of the dock. Up to 10 permanent piles would be set at a time, before moving the template to the next position to install the next 10 piles. Permanent piles would be set with vibratory hammers and if required, impact hammers would be used to drive the pile past any overburden to the bedrock. Once the pile reaches bedrock DTH systems would socket the pile approximately 10-ft into the bedrock. A permanent 55.5-in (140-cm) sheet pile would be installed using vibratory and impact hammers and attached to the permanent piles to make up the new dock return wall.

TABLE 1—NUMBER AND TYPES OF PILES TO BE INSTALLED AND REMOVED

	Guide pile removal (steel)	Dolphin pile removal (steel)	Temporary pile (steel)	Temporary pile removal (steel)	Permanent pile installation (steel)	Sheet pile installation (steel)
Pile Diameter size (in)	24	16	36	36	42	55.5
Vibratory Pile Driving/Removal:						
Total Quantity	1	24	42	42	180	40
Max # of Piles per day	1	4	4	4	4	6
Vibratory time per pile (min)	45	45	15	15	45	30
Number of Days	1	6	11	11	45	7
Impact Pile Driving:						
Total Quantity	N/A	N/A	42	N/A	180	40
Piles per day	N/A	N/A	4	N/A	4	6
Strikes per pile	N/A	N/A	900	N/A	1,500	900
Number of Days	N/A	N/A	11	N/A	45	7
Down the Hole Drilling:						
Total Quantity	N/A	N/A	N/A	N/A	180	N/A
Piles per day	N/A	N/A	N/A	N/A	2	N/A
Duration time per pile (min)	N/A	N/A	N/A	N/A	300	N/A
Strikes per pile	N/A	N/A	N/A	N/A	324,000	N/A
Number of Days	N/A	N/A	N/A	N/A	90	N/A

Above-water construction would include replacement of the dock surface and fill material placement. This above-water work is not expected to result in any take of marine mammals, as there are no pinniped haulouts close enough to be affected by airborne noise.

Proposed mitigation, monitoring, and reporting measures are described in detail later in this document (see Proposed Mitigation and Proposed Monitoring and Reporting).

Description of Marine Mammals in the Area of Specified Activities

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

Table 2 lists all species or stocks for which take is expected and proposed to be authorized for this activity, and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS' SARs). While no serious injury or mortality is anticipated or proposed to be authorized here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species or stocks and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS' stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS' Alaska SARs (Young *et. al.,* 2023). All values presented in table 2 are the most recent available at the time of publication and are available online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments.*

TABLE 2—SPECIES LIKELY IMPACTED BY THE SPECIFIED ACTIVITIES [1]

Common name	Scientific name	Stock	ESA/ MMPA status; strategic (Y/N) [2]	Stock abundance (CV, N_{min}, most recent abundance survey) [3]	PBR	Annual M/SI [4]
Order Artiodactyla—Infraorder Cetacea—Mysticeti (baleen whales)						
Family Balaenopteridae (rorquals):						
Humpback whale	*Megaptera novaeangliae*	Hawai'i	-,-, N	11,278 (0.56, 7,265, 2020)	127	27.09
		Mexico-North Pacific	T, D, Y	N/A (N/A, N/A, 2006)	UND	0.57
Odontoceti (toothed whales, dolphins, and porpoises)						
Family Delphinidae:						
Killer whale	*Orcinus orca*	Eastern North Pacific Alaska Resident.	-, -, N	1,920 (N/A, 1,920, 2019)	19	1.3
		Eastern Northern Pacific Northern Resident.	-, -, N	302 (N/A, 302, 2018)	2.2	0.2
		West Coast Transient	-, -, N	349 (N/A, 349, 2018)	3.5	0.4
Family Phocoenidae (porpoises):						
Harbor porpoise	*Phocoena phocoena*	Northern Southeast Alaska Inland Waters.	-, -, N	1,619 (0.26, 1,250, 2019)	13	5.6
Dall's Porpoise	*Phocoenoides dalli*	Alaska	-, -, N	UND (UND, UND, 2015)	UND	37
Order Carnivora—Pinnipedia						
Family Otariidae (eared seals and sea lions):						
Steller sea lion	*Eumetopias jubatus*	Eastern DPS	-, -, N	43,201 (N/A, 43,201, 2017)	2,592	112
		Western DPS	E, D, Y	52,932 (N/A, 52,932, 2019)	318	254
Family Phocidae (earless seals)						
Harbor Seal	*Phoca vitulina*	Lynn Canal/Stephens Passage.	-, -, N	13,388 (N/A, 11,867, 2016)	214	50

[1] Information on the classification of marine mammal species can be found on the web page for The Society for Marine Mammalogy's Committee on Taxonomy (*https://www.marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies/*; Committee on Taxonomy (2022)).

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

[3] NMFS marine mammal stock assessment reports online at: *https://www. https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports/*. CV is coefficient of variation; Nmin is the minimum estimate of stock abundance. In some cases, CV is not applicable.

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

As indicated above, all six species (with 10 managed stocks) in table 2 temporally and/or spatially co-occur with the activity to the degree that take is reasonably likely to occur. While minke whales (*Balaenoptera acutorostrata*) and Pacific white-sided dolphins (*Lagenorhynchus obliquidens*) have been sighted in the area, the temporal and spatial occurrence of these species is such that take is not expected to occur, and they are not discussed further beyond the explanation provided here. A construction project to improve the Alaska Marine Lines, Inc. dock in Lutak, AK authorized the take of two minke whales by Level B harassment (85 FR 22139, April 21, 2020). A similar project in Skagway, AK to install dolphins on the Railroad Dock also authorized the take of two minke whales by Level B harassment (84 FR 4777, February 19, 2019). Pacific white-sided dolphins were not authorized for take in either project due to their extremely rare occurrence in the project areas (Dahlheim *et al.,* 2009). There were no sightings by monitors of minke whales or Pacific white-sided dolphins during either construction project (Tom Mortensen Associates, LLC, 2021; Owl Ridge Natural Resource Consultants, 2019). Therefore, take is not expected for these species and they are not discussed further in this document.

Humpback Whale

On September 8, 2016, NMFS divided the once single species into 14 distinct population segments (DPS) under the ESA, removed the species-level listing as endangered, and, in its place, listed four DPSs as endangered and one DPS as threatened (81 FR 62259; September 8, 2016). The remaining nine DPSs were not listed. There are four DPSs in the North Pacific, including Western North Pacific and Central America, which are listed as endangered, Mexico, which is listed as threatened, and Hawaii, which is not listed.

The 2022 Alaska and Pacific SARs described a revised stock structure for humpback whales which modifies the previous stocks designated under the MMPA to align more closely with the ESA-designated DPSs (Caretta *et al.,* 2023; Young *et al.,* 2023). Specifically, the three previous North Pacific humpback whale stocks (Central and western North Pacific stocks and a CA/OR/WA stock) were replaced by five stocks, largely corresponding with the ESA-designated DPSs. These include Western North Pacific and Hawaii stocks and a Central America/Southern Mexico-CA/OR/WA stock (which corresponds with the Central America DPS). The remaining two stocks, corresponding with the Mexico DPS, are the Mainland Mexico-CA/OR/WA and Mexico-North Pacific stocks (Caretta *et al.,* 2023; Young *et al.,* 2023). The former stock is expected to occur along the west coast from California to southern British Columbia, while the latter stock may occur across the Pacific, from northern British Columbia through the Gulf of Alaska and Aleutian Islands/Bering Sea region to Russia.

The Hawai'i stock consists of one demographically independent population (DIP)—Hawai'i–southeast Alaska/northern British Columbia DIP and one unit—Hawai'i–north Pacific unit, which may or may not be composed of multiple DIPs (Wade *et al.,* 2021). The DIP and unit are managed as a single stock at this time, due to the lack of data available to separately assess them and lack of compelling conservation benefit to managing them separately (NMFS, 2023; NMFS, 2019; NMFS, 2022b). The DIP is delineated based on two strong lines of evidence: genetics and movement data (Wade *et al.,* 2021). Whales in the Hawai'i–southeast Alaska/northern British Columbia DIP winter off Hawai'i and largely summer in southeast Alaska and northern British Columbia (Wade *et al.,* 2021). The group of whales that migrate from Russia, western Alaska (Bering Sea and Aleutian Islands), and central Alaska (Gulf of Alaska excluding southeast Alaska) to Hawai'i have been delineated as the Hawai'i-North Pacific unit (Wade *et al.,* 2021). There are a small number of whales that migrate between Hawai'i and southern British Columbia/Washington, but current data and analyses do not provide a clear understanding of which unit these whales belong to (Wade *et al.,* 2021; Caretta *et al.,* 2023; Young *et al.,* 2023).

The Mexico–North Pacific unit is likely composed of multiple DIPs, based on movement data (Martien *et al.,* 2021; Wade, 2021, Wade *et al.,* 2021). However, because currently available data and analyses are not sufficient to delineate or assess DIPs within the unit, it was designated as a single stock (NMFS, 2023a; NMFS, 2019; NMFS, 2022c). Whales in this stock winter off Mexico and the Revillagigedo Archipelago and summer primarily in Alaska waters (Martien *et al.,* 2021; Carretta *et al.,* 2023; Young *et al.,* 2023).

NMFS identified most of southeast Alaska, including Lynn Canal, as a Biologically Important Area (BIA) for humpback whales for feeding during the months of June through August; however, the proposed action area is northwest of and outside the boundaries of the BIA (Wild *et al.,* 2023). No humpback whales were observed in Lutak Inlet during monitoring for the Alaska Marine Lines, Inc. dock improvement project in Lutak in November 2020 (Tom Mortensen Associates, LLC, 2021). However, sightings of humpbacks are common in southeast Alaska (Dahlheim *et al.,* 2009). In Lynn Canal and Lutak Inlet, humpback whales are traditionally observed during seasons of high prey concentration, May through September (Witteveen *et al.,* 2011; SolsticeAK, 2023).

Group sizes of humpback whales vary depending on the season, but based on sightings from local charter captains a group size of two can be expected from May through September and from October through April a group size of one can be expected (SolsticeAK, 2023; Straley *et al.,* 2018; Happywhale, 2023).

Killer Whale

Based on data regarding association patterns, acoustics, movements, and genetic differences, eight killer whale stocks are now recognized within the Pacific U.S. Exclusive Economic Zone, seven of which occur in Alaska. Of these eight stocks the three stocks most likely to occur in Lynn Canal are (1) the Alaska Resident stock which ranges from southeastern Alaska to the Aleutian Islands and Bering Sea; (2) the Northern Resident stock which occurs from Washington State through part of southeastern Alaska; and (3) the West Coast Transient stock which ranges from California through southeastern Alaska (Muto *et al.,* 2022).

Transient killer whales hunt and feed primarily on marine mammals, while residents forage primarily on fish. Transient killer whales feed primarily on harbor seals, Dall's porpoises, harbor porpoises, and sea lions. Resident killer whale populations in the eastern North Pacific feed mainly on salmonids, showing a strong preference for Chinook salmon (NMFS, 2016a).

Killer whales are common near the project area. During the monitoring of the White Pass and Yukon Railroad dock dolphin project groups of killer whales from one to nine individuals were observed from March through April (Owl Ridge Natural Resource Consultants, 2019). Group sizes of up to 15 may be expected during the project based on surveys conducted in southeast Alaska conducted by Witteveen *et al.* (2011).

Harbor Porpoise

The 2022 Alaska SARs described a revised stock structure for southeast Alaska harbor porpoise, which were split from one stock into three: the Northern Southeast Alaska Inland Waters, Southern Southeast Alaska Inland Waters, and Yakutat/Southeast Alaska Offshore Waters harbor porpoise stocks. This update better aligns harbor porpoise stock structure with genetics, trends in abundance, and information regarding discontinuous distribution trends (Young *et al.,* 2023). Harbor porpoises found in Lutak are assumed to be members of the northern southeast Alaska Inland Waters stock, which encompasses Cross Sound, Glacier Bay, Icy Strait, Chatham Strait, Frederick Sound, Stephens Passage, Lynn Canal, and adjacent inlets.

Harbor porpoise are expected to be infrequent visitors to the upper portions of the Lynn Canal (Dahlheim *et al.,* 2009). Recent monitoring from the Alaska Marine Lines, Inc. dock improvement project in Lutak and the White Pass and Yukon Railroad dock dolphin project did not observe any harbor porpoises in the project areas during construction (Tom Mortensen Associates, LLC, 2021; Owl Ridge Natural Resource Consultants, 2019). A group size of two harbor porpoise is expected during the project based on survey data from Dahlheim *et al.* (2009).

Dall's Porpoise

Dall's porpoises are found throughout the North Pacific, from southern Japan to southern California and north to the Bering Sea. All Dall's porpoises in Alaska are members of the Alaska stock, and those off California, Oregon, and Washington are part of a separate stock. This species can be found in offshore, inshore, and nearshore habitat, but prefers waters more than 600 ft (183 m) deep (Dahlheim *et al.* 2009; Jefferson, 2009).

Dall's porpoises have been consistently observed in Lynn Canal, Stephens Passage, upper Chatham Strait, Frederick Sound, and Clarence Strait (Dalheim *et al.,* 2000). The species is generally found in waters deeper than Lutak Inlet. However, despite generalized water depth preferences, Dall's porpoises may occur in shallower waters. Moran *et al.* (2018a) recently mapped Dall's porpoise distributions in bays, shallow water, and nearshore areas of Prince William Sound, habitats not typically utilized by this species. No Dall's porpoises were observed in Lutak Inlet during monitoring for the Alaska Marine Lines, Inc. dock improvement project in Lutak and the White Pass and Yukon Railroad dock dolphin project did not observe any Dall's porpoises in the project areas during construction (Tom Mortensen Associates, LLC, 2021; Owl Ridge Natural Resource Consultants, 2019). Although sightings near the project area are infrequent, a local tour boat captain confirmed there are occasional sightings of Dall's porpoises in Taiya Inlet, but most often they are seen farther south near Mud Bay, 15 km (9 mi) south of the project area (SolsticeAK 2023). It is expected that groups of two Dall's porpoise would be present in the project area based on survey data from Dahlheim *et al.* (2009) and on sighting data from above.

Steller Sea Lion

Steller sea lions were listed as threatened range-wide under the ESA on November 26, 1990 (55 FR 49204). Steller sea lions were subsequently partitioned into the western and eastern DPSs in 1997 (62 FR 24345, May 5, 1997). The eastern DPS remained classified as threatened until it was delisted on November 4, 2013 (78 FR 66140). The western DPS (those individuals west of the 144° W longitude or Cape Suckling, Alaska) was upgraded to endangered status following separation of the DPSs on May 5, 1997 (62 FR 24345). Both stocks of Steller sea lions are found in southeast Alaska and have the potential to occur in the project area, however it is more likely they would be from the eastern stock.

The majority of Steller sea lions that inhabit southeast Alaska are part of the eastern DPS; however, branded individuals from the western DPS make regular movements across the 144° longitude boundary to the northern ''mixing zone'' haulouts and rookeries within southeast Alaska (Jemison *et al.,* 2013). While haulouts and rookeries in the northern portion of southeast Alaska may be important areas for wDPS animals, there continues to be little evidence that their regular range extends to the southern haulouts and rookeries in southeast Alaska (Jemison *et al.,* 2018). However, genetic data analyzed in Hastings *et al.* (2020) indicated that up to 1.4 percent of Steller sea lions near Lutak Inlet may be members of the western DPS.

Gran Point is the closest major haulout and designated critical habitat area, approximately 10 miles (16 kilometers) from the Project site and outside of Taiya Inlet. The Lutak Inlet eulachon (*Thaleichtys pacificus*) run between April and May correlates with higher sea lion numbers near the Project site, with the Taiya Point haulout (approximately 10 miles (16.1 kilometers) away) being a popular land site (NOAA, 2022b).

During the White Pass & Yukon Route Railroad dock dolphin project, Steller sea lions were sighted on 27 separate days with 165 individuals observed. A majority of the sightings occurred during April and May, with only six individuals sighted in March. Although a few sightings were 500 m from pile driving activities, most sightings were recorded over 1,000 m away from the pile driving site. Sightings were of single individuals and rafts up to 25 individuals (Owl Ridge Natural Resource Consultants, 2019). Monitoring at the Alaska Marine Lines, Inc. dock improvement project in Lutak observed lone Steller sea lions on 2 separate days (November 12 and 15, 2020). The sightings were between 800 m and 1,400 m from the pile driving (Tom Mortensen Associates, LLC, 2020). It is expected that groups of 40 may occur from mid-March through May during the eulachon run and groups of 2 the rest of the year.

Harbor Seal

Harbor seals inhabit coastal and estuarine waters off Alaska. They haul out on rocks, reefs, beaches, and drifting glacial ice. They are opportunistic feeders and often adjust their distribution to take advantage of locally and seasonally abundant prey (Womble *et al.,* 2009; Allen and Angliss, 2015). Harbor seals occurring in the project area belong to the Lynn Canal/Stephens Passage (LC/SP) stock. Harbor seals are common in Lutak Inlet and in Chilkat Inlet where there is a small haulout at Pyramid Island. They are abundant in the Chilkat and Chilkoot rivers in late fall and winter during spawning runs of salmon (*Onchorhynchus spp.*) and in the spring (mid-March through mid-May) when eulachon are present. As many as about 100 individuals have been observed actively feeding in Lutak Inlet near the mouth of the Chilkoot River, and at up-river locations during these fish runs (ADF&G, 2016).

Seven hundred thirty-five harbor seals were observed on 46 days of in-water activity, with sightings occurring in all months of the project. The majority of the harbor seal observations were near Yakutania Point, a harbor seal haulout site. Most of the sightings occurred at least 1,000 m from the project site, however harbor seals came as close as 150 m and as far as 5,000 m. Harbor seals were observed travelling, swimming, playing, milling, looking, hauled out, sinking, and feeding (Owl Ridge Natural Resource Consultants, 2019). During the Alaska Marine Lines, Inc. dock improvement project in Lutak one lone harbor seal was observed 800 m away from the source. It is expected that groups of 100 may occur from mid-March through May and groups of 5 throughout the rest of the year.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Not all marine mammal species have equal hearing capabilities (*e.g.,* Richardson *et al.,* 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007, 2019) recommended that marine mammals be divided into hearing groups based on directly measured (behavioral or auditory evoked potential techniques) or estimated hearing ranges (behavioral response data, anatomical modeling, etc.). Note that no direct measurements of hearing ability have been successfully completed for mysticetes (*i.e.,* low-frequency cetaceans). Subsequently, NMFS (2018) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the approximately 65-decibel (dB) threshold from the normalized composite audiograms, with the exception for lower limits for low-frequency cetaceans where the lower bound was deemed to be biologically implausible and the lower bound from Southall *et al.* (2007) retained. Marine mammal hearing groups and their associated hearing ranges are provided in table 3.

TABLE 3—MARINE MAMMAL HEARING GROUPS

[NMFS, 2018]

Hearing group	Generalized hearing range *
Low-frequency (LF) cetaceans (baleen whales)	7 Hz to 35 kHz.
Mid-frequency (MF) cetaceans (dolphins, toothed whales, beaked whales, bottlenose whales)	150 Hz to 160 kHz.
High-frequency (HF) cetaceans (true porpoises, *Kogia,* river dolphins, Cephalorhynchid, *Lagenorhynchus cruciger* & *L. australis*).	275 Hz to 160 kHz.
Phocid pinnipeds (PW) (underwater) (true seals)	50 Hz to 86 kHz.

TABLE 3—MARINE MAMMAL HEARING GROUPS—Continued

[NMFS, 2018]

Hearing group	Generalized hearing range *
Otariid pinnipeds (OW) (underwater) (sea lions and fur seals)	60 Hz to 39 kHz.

* Represents the generalized hearing range for the entire group as a composite (*i.e.,* all species within the group), where individual species' hearing ranges are typically not as broad. Generalized hearing range chosen based on ~65 dB threshold from normalized composite audiogram, with the exception for lower limits for LF cetaceans (Southall *et al.,* 2007) and PW pinniped (approximation).

The pinniped functional hearing group was modified from Southall *et al.* (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemilä *et al.,* 2006; Kastelein *et al.,* 2009; Reichmuth and Holt, 2013).

For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information.

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

This section provides a discussion of the ways in which components of the specified activity may impact marine mammals and their habitat. The Estimated Take of Marine Mammals section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The Negligible Impact Analysis and Determination section considers the content of this section, the Estimated Take of Marine Mammals section, and the Proposed Mitigation section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and whether those impacts are reasonably expected to, or reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Description of Sound Sources

The marine soundscape is comprised of both ambient and anthropogenic sounds. Ambient sound is defined as the all-encompassing sound in a given place and is usually a composite of sound from many sources both near and far. The sound level of an area is defined by the total acoustical energy being generated by known and unknown sources. These sources may include physical (*e.g.,* waves, wind, precipitation, earthquakes, ice, atmospheric sound), biological (*e.g.,* sounds produced by marine mammals, fish, and invertebrates), and anthropogenic sound (*e.g.,* vessels, dredging, aircraft, construction).

The sum of the various natural and anthropogenic sound sources at any given location and time—which comprise ''ambient'' or ''background'' sound—depends not only on the source levels (as determined by current weather conditions and levels of biological and shipping activity) but also on the ability of sound to propagate through the environment. In turn, sound propagation is dependent on the spatially and temporally varying properties of the water column and sea floor, and is frequency-dependent. As a result of the dependence on a large number of varying factors, ambient sound levels can be expected to vary widely over both coarse and fine spatial and temporal scales. Sound levels at a given frequency and location can vary by 10 to 20 dB from day to day (Richardson *et al.,* 1995). The result is that, depending on the source type and its intensity, sound from the specified activity may be a negligible addition to the local environment or could form a distinctive signal that may affect marine mammals.

In-water construction activities associated with the project would include impact pile driving, vibratory pile driving, vibratory pile removal, DTH installation. The sounds produced by these activities fall into one of two general sound types: impulsive and non-impulsive. Impulsive sounds (*e.g.,* explosions, gunshots, sonic booms, impact pile driving) are typically transient, brief (less than 1 second), broadband, and consist of high peak sound pressure with rapid rise time and rapid decay (ANSI, 1986; NIOSH, 1998; ANSI, 2005; NMFS, 2018). Non-impulsive sounds (*e.g.,* aircraft, machinery operations such as drilling or dredging, vibratory pile driving, and active sonar systems) can be broadband, narrowband or tonal, brief or prolonged (continuous or intermittent), and typically do not have the high peak sound pressure with raid rise/decay time that impulsive sounds do (ANSI, 1995; NIOSH, 1998; NMFS, 2018). The distinction between these two sound types is important because they have differing potential to cause physical effects, particularly with regard to hearing (*e.g.,* Ward, 1997; Southall, *et al.* 2007).

Impact hammers operate by repeatedly dropping a heavy piston onto a pile to drive the pile into the substrate. Sound generated by impact hammers is characterized by rapid rise times and high peak levels, a potentially injurious combination (Hastings and Popper, 2005). Vibratory hammers install piles by vibrating them and allowing the weight of the hammer to push them into the sediment. Vibratory hammers produce significantly less sound than impact hammers. Peak sound pressure levels (SPLs) may be 180 dB or greater, but are generally 10 to 20 dB lower than SPLs generated during impact pile driving of the same-sized pile (Oestman, *et al.,* 2009). Rise time is slower, reducing the probability and severity of injury, and sound energy is distributed over a greater amount of time (Nedwell and Edwards, 2002; Carlson, *et al.,* 2005).

DTH systems would also be used during the proposed construction. A DTH hammer is essentially a drill bit that drills through the bedrock using a rotating function like a normal drill, in concert with a hammering mechanism operated by a pneumatic (or sometimes hydraulic) component integrated into the DTH hammer to increase speed of progress through the substrate (*i.e.,* it is similar to a ''hammer drill'' hand tool). The sounds produced by the DTH methods contain both a continuous non-impulsive component from the drilling action and an impulsive component from the hammering effect. Therefore, NMFS treats DTH systems as both impulsive and continuous, non-impulsive sound source types simultaneously.

The likely or possible impacts of the Haines Borough's proposed activities on marine mammals could involve both non-acoustic and acoustic stressors. Potential non-acoustic stressors could result from the physical presence of the equipment and personnel; however, given there are no known pinniped haul-out sites in the vicinity of the proposed project site, visual and other non-acoustic stressors would be limited, and any impacts to marine mammals are

expected to primarily be acoustic in nature.

Auditory Effects

The introduction of anthropogenic noise into the aquatic environment from pile driving or drilling is the primary means by which marine mammals may be harassed from the Haines Borough specified activity. In general, animals exposed to natural or anthropogenic sound may experience physical and psychological effects, ranging in magnitude from none to severe (Southall *et al.,* 2007; Southall *et al.,* 2019). In general, exposure to pile driving or drilling noise has the potential to result in auditory threshold shifts and behavioral reactions (*e.g.,* avoidance, temporary cessation of foraging and vocalizing, changes in dive behavior). Exposure to anthropogenic noise can also lead to non-observable physiological responses, such an increase in stress hormones. Additional noise in a marine mammal's habitat can mask acoustic cues used by marine mammals to carry out daily functions, such as communication and predator and prey detection. The effects of pile driving or drilling noise on marine mammals are dependent on several factors, including, but not limited to, sound type (*e.g.,* impulsive vs. non-impulsive), the species, age and sex class (*e.g.,* adult male vs. mom with calf), duration of exposure, the distance between the pile and the animal, received levels, behavior at time of exposure, and previous history with exposure (Wartzok *et al.,* 2004; Southall *et al.,* 2007). Here we discuss physical auditory effects (threshold shifts) followed by behavioral effects and potential impacts on habitat.

NMFS defines a noise-induced threshold shift (TS) as a change, usually an increase, in the threshold of audibility at a specified frequency or portion of an individual's hearing range above a previously established reference level (NMFS, 2018). The amount of threshold shift is customarily expressed in dB. A TS can be permanent or temporary. As described in NMFS (2018a), there are numerous factors to consider when examining the consequence of TS, including, but not limited to, the signal temporal pattern (*e.g.,* impulsive or non-impulsive), likelihood an individual would be exposed for a long enough duration or to a high enough level to induce a TS, the magnitude of the TS, time to recovery (seconds to minutes or hours to days), the frequency range of the exposure (*i.e.,* spectral content), the hearing and vocalization frequency range of the exposed species relative to the signal's frequency spectrum (*i.e.,* how animal uses sound within the frequency band of the signal; *e.g.,* Kastelein *et al.,* 2014), and the overlap between the animal and the source (*e.g.,* spatial, temporal, and spectral). When considering auditory effects for the DOT&PF's proposed activities, vibratory pile driving is considered a non-impulsive source, while impact pile driving is treated as an impulsive source. DTH systems are considered to have both non-impulsive and impulsive components.

Permanent Threshold Shift (PTS)—NMFS defines PTS as a permanent, irreversible increase in the threshold of audibility at a specified frequency or portion of an individual's hearing range above a previously established reference level (NMFS, 2018). PTS does not generally affect more than a limited frequency range, and an animal that has incurred PTS has incurred some level of hearing loss at the relevant frequencies; typically animals with PTS are not functionally deaf (Richardson *et al.,* 1995; Au and Hastings, 2008). Available data from humans and other terrestrial mammals indicate that a 40 dB threshold shift approximates PTS onset (Ward *et al.,* 1958, Ward *et al.,* 1959; Ward, 1960; Kryter *et al.,* 1966; Miller, 1974; Ahroon *et al.,* 1996; Henderson *et al.,* 2008). PTS criteria for marine mammals are estimates, as with the exception of a single study unintentionally inducing PTS in a harbor seal (Kastak *et al.,* 2008), there are no empirical data measuring PTS in marine mammals largely due to the fact that, for various ethical reasons, experiments involving anthropogenic noise exposure at levels inducing PTS are not typically pursued or authorized (NMFS, 2018).

Temporary Threshold Shift (TTS)—A temporary, reversible increase in the threshold of audibility at a specified frequency or portion of an individual's hearing range above a previously established reference level (NMFS, 2018). Based on data from cetacean TTS measurements (Southall *et al.,* 2007; Southall *et al.,* 2019), a TTS of 6 dB is considered the minimum threshold shift clearly larger than any day-to-day or session-to-session variation in a subject's normal hearing ability (Schlundt *et al.,* 2000; Finneran *et al.,* 2000; Finneran *et al.,*2002). As described in Finneran (2015), marine mammal studies have shown the amount of TTS increases with SELcum in an accelerating fashion: at low exposures with lower SELcum, the amount of TTS is typically small and the growth curves have shallow slopes. At exposures with higher SELcum, the growth curves become steeper and approach linear relationships with the noise SEL.

Depending on the degree (elevation of threshold in dB), duration (*i.e.,* recovery time), and frequency range of TTS, and the context in which it is experienced, TTS can have effects on marine mammals ranging from discountable to serious (similar to those discussed in auditory masking, below). For example, a marine mammal may be able to readily compensate for a brief, relatively small amount of TTS in a non-critical frequency range that takes place during a time when the animal is traveling through the open ocean, where ambient noise is lower and there are not as many competing sounds present. Alternatively, a larger amount and longer duration of TTS sustained during time when communication is critical for successful mother/calf interactions could have more serious impacts. We note that reduced hearing sensitivity as a simple function of aging has been observed in marine mammals, as well as humans and other taxa (Southall *et al.,* 2007), so we can infer that strategies exist for coping with this condition to some degree, though likely not without cost.

Many studies have examined noise-induced hearing loss in marine mammals (see Finneran (2015) and Southall *et al.* (2019) for summaries). TTS is the mildest form of hearing impairment that can occur during exposure to sound (Kryter, 2013). While experiencing TTS, the hearing threshold rises, and a sound must be at a higher level in order to be heard. In terrestrial and marine mammals, TTS can last from minutes or hours to days (in cases of strong TTS). In many cases, hearing sensitivity recovers rapidly after exposure to the sound ends. For cetaceans, published data on the onset of TTS are limited to captive bottlenose dolphin (*Tursiops truncatus*), beluga whale (*Delphinapterus leucas*), harbor porpoise, and Yangtze finless porpoise (*Neophocoena asiaeorientalis*) (Southall *et al.,* 2019). For pinnipeds in water, measurements of TTS are limited to harbor seals, elephant seals (*Mirounga angustirostris*), bearded seals (*Erignathus barbatus*), and California sea lions (*Zalophus californianus*) (Kastak *et al.,* 1999; Kastak *et al.,* 2007; Kastelein *et al.,* 2019b; Kastelein *et al.,* 2019c; Reichmuth *et al.,* 2019; Sills *et al.,* 2020; Kastelein *et al.,* 2021; Kastelein *et al.,* 2022a; Kastelein *et al.,* 2022b). These studies examine hearing thresholds measured in marine mammals before and after exposure to intense or long-duration sound exposures. The difference between the

pre-exposure and post-exposure thresholds can be used to determine the amount of threshold shift at various post-exposure times.

The amount and onset of TTS depends on the exposure frequency. Sounds at low frequencies, well below the region of best sensitivity for a species or hearing group, are less hazardous than those at higher frequencies, near the region of best sensitivity (Finneran and Schlundt, 2013). At low frequencies, onset-TTS exposure levels are higher compared to those in the region of best sensitivity (*i.e.,* a low frequency noise would need to be louder to cause TTS onset when TTS exposure level is higher), as shown for harbor porpoises and harbor seals (Kastelein *et al.,* 2019a; Kastelein *et al.,* 2019c). Note that in general, harbor seals and harbor porpoises have a lower TTS onset than other measured pinniped or cetacean species (Finneran, 2015). In addition, TTS can accumulate across multiple exposures, but the resulting TTS will be less than the TTS from a single, continuous exposure with the same SEL (Mooney *et al.,* 2009; Finneran *et al.,* 2010; Kastelein *et al.,* 2014; 2015). This means that TTS predictions based on the total, cumulative SEL will overestimate the amount of TTS from intermittent exposures, such as sonars and impulsive sources. Nachtigall *et al.* (2018) describe measurements of hearing sensitivity of multiple odontocete species (bottlenose dolphin, harbor porpoise, beluga, and false killer whale (*Pseudorca crassidens*) when a relatively loud sound was preceded by a warning sound. These captive animals were shown to reduce hearing sensitivity when warned of an impending intense sound. Based on these experimental observations of captive animals, the authors suggest that wild animals may dampen their hearing during prolonged exposures or if conditioned to anticipate intense sounds. Another study showed that echo-locating animals (including odontocetes) might have anatomical specializations that might allow for conditioned hearing reduction and filtering of low-frequency ambient noise, including increased stiffness and control of middle ear structures and placement of inner ear structures (Ketten *et al.,* 2021). Data available on noise-induced hearing loss for mysticetes are currently lacking (NMFS, 2018). Additionally, the existing marine mammal TTS data come from a limited number of individuals within these species.

Relationships between TTS and PTS thresholds have not been studied in marine mammals, and there is no PTS data for cetaceans, but such relationships are assumed to be similar to those in humans and other terrestrial mammals. PTS typically occurs at exposure levels at least several decibels above (a 40-dB threshold shift approximates PTS onset; *e.g.,* Kryter *et al.,* 1966; Miller, 1974) that inducing mild TTS (a 6-dB threshold shift approximates TTS onset; *e.g.,* Southall *et al.,* 2007). Based on data from terrestrial mammals, a precautionary assumption is that the PTS thresholds for impulsive sounds (such as impact pile driving pulses as received close to the source) are at least 6 dB higher than the TTS threshold on a peak-pressure basis and PTS cumulative sound exposure level thresholds are 15 to 20 dB higher than TTS cumulative sound exposure level thresholds (Southall *et al.,* 2007). Given the higher level of sound or longer exposure duration necessary to cause PTS as compared with TTS, it is considerably less likely that PTS could occur.

Furthermore, installing piles for this project requires a combination of impact pile driving, vibratory pile driving, and DTH drilling. For the project, these activities would not occur at the same time and there would likely be pauses in activities producing the sound during each day. Given these pauses and that many marine mammals are likely moving through the action area and not remaining for extended periods of time, the potential for any TS declines.

Behavior Effects

Exposure to noise from pile driving and removal also has the potential to behaviorally disturb marine mammals. Available studies show wide variation in response to underwater sound; therefore, it is difficult to predict specifically how any given sound in a particular instance might affect marine mammals perceiving the signal. If a marine mammal does react briefly to an underwater sound by changing its behavior or moving a small distance, the impacts of the change are unlikely to be significant to the individual, let alone the stock or population. However, if a sound source displaces marine mammals from an important feeding or breeding area for a prolonged period, impacts on individuals and populations could be significant (*e.g.,* Lusseau and Bejder, 2007; Weilgart, 2007; NRC, 2005; Southall *et al.,* 2021).

Disturbance may result in changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities (such as socializing or feeding); visible startle response or aggressive behavior (such as tail/fluke slapping or jaw clapping); avoidance of areas where sound sources are located. Pinnipeds may increase their haul out time, possibly to avoid in-water disturbance (Thorson and Reyff, 2006). Behavioral responses to sound are highly variable and context-specific and any reactions depend on numerous intrinsic and extrinsic factors (*e.g.,* species, state of maturity, experience, current activity, reproductive state, auditory sensitivity, time of day), as well as the interplay between factors (*e.g.,* Richardson *et al.,* 1995; Wartzok *et al.,* 2003; Southall *et al.,* 2007, Southall *et al.* 2021; Weilgart, 2007; Archer *et al.,* 2010). Behavioral reactions can vary not only among individuals but also within exposures of an individual, depending on previous experience with a sound source, context, and numerous other factors (Ellison *et al.,* 2012; Southall *et al.,* 2021), and can vary depending on characteristics associated with the sound source (*e.g.,* whether it is moving or stationary, number of sources, distance from the source). In general, pinnipeds seem more tolerant of, or at least habituate more quickly to, potentially disturbing underwater sound than do cetaceans, and generally seem to be less responsive to exposure to industrial sound than most cetaceans. For a review of studies involving marine mammal behavioral responses to sound, see: Southall *et al.,* 2007; Gomez *et al.,* 2016; and Southall *et al.,* 2021.

Disruption of feeding behavior can be difficult to correlate with anthropogenic sound exposure, so it is usually inferred by observed displacement from known foraging areas, the appearance of secondary indicators (*e.g.,* bubble nets or sediment plumes), or changes in dive behavior. As for other types of behavioral response, the frequency, duration, and temporal pattern of signal presentation, as well as differences in species sensitivity, are likely contributing factors to differences in response in any given circumstance (*e.g.,* Croll *et al.,* 2001; Nowacek *et al.,* 2004; Madsen *et al.,* 2006; Yazvenko *et al.,* 2007). A determination of whether foraging disruptions incur fitness consequences would require information on or estimates of the energetic requirements of the affected individuals and the relationship between prey availability, foraging effort and success, and the life history stage of the animal.

The area likely impacted by the project is relatively small compared to the available habitat in the surrounding waters of the Lynn Canal.

In 2019, the White Pass & Yukon Route Railroad dolphin replacement project (84 FR 4777, February 19, 2019) documented observations of marine mammals during construction activities (*i.e.,* pile driving) in Skagway, AK. This project was roughly 15 mi (24 km) from the proposed project site and features that are very similar (*i.e.* narrow inlet off the Lynn Canal). During the 57-day (March–May) protected species monitoring 26 killer whales and 2 humpback whales were observed traveling, diving, and swimming. There were 735 harbor seals and 165 Steller sea lions observed during the monitoring period of the project. Harbor seals and Steller sea lions were observed travelling, swimming, playing, milling, traveling, resting, porpoising, looking, hauled out, sinking, and feeding (Owl Ridge Natural Resource Consultants, 2019). During the monitoring of the 2020 Alaska Marine Lines, Inc. dock in Lutak, AK (85 FR 22139, April 21, 2020) protected species observers (PSOs) recorded two Steller sea lions and one harbor seal in the Level B harassment zone. Both species spent less than 5 minutes in the zone (Tom Mortensen Associates, LLC, 2021). No visible signs of disturbance were noted for any of these species that were present in at either project. Given the similarities in activities and habitat and the fact the same species are involved, we expect similar behavioral responses of marine mammals to the specified activity. That is, disturbance, if any, is likely to be temporary and localized (*e.g.,* small area movements).

Airborne Acoustic Effects—Pinnipeds that occur near the project site could be exposed to airborne sounds associated with pile driving and removal that have the potential to cause behavioral harassment, depending on their distance from pile driving activities. Cetaceans are not expected to be exposed to airborne sounds that would result in harassment as defined under the MMPA.

Airborne noise would primarily be an issue for pinnipeds that are swimming near the project site within the range of noise levels exceeding the acoustic thresholds. We recognize that pinnipeds in the water could be exposed to airborne sound that may result in behavioral harassment when looking with their heads above water. Most likely, airborne sound would cause behavioral responses similar to those discussed above in relation to underwater sound. For instance, anthropogenic sound could cause pinnipeds to exhibit changes in their normal behavior, such as reduction in vocalizations, or cause them to temporarily abandon the area and move further from the source. However, these animals would previously have been ''taken'' because of exposure to underwater sound above the behavioral harassment thresholds, which are in all cases larger than those associated with airborne sound. Thus, the behavioral harassment of these animals is already accounted for in these estimates of potential take. Therefore, we do not believe that authorization of incidental take resulting from airborne sound for pinnipeds is warranted, and airborne sound is not discussed further here.

Marine Mammal Habitat Effects

The proposed project would occur within the same footprint as existing marine infrastructure. The nearshore habitat where the proposed project would occur is an area of relatively high marine vessel traffic. Most marine mammals do not generally use the area within the immediate vicinity of the project area. Temporary, intermittent, and short-term habitat alteration may result from increased noise levels within the Level A and Level B harassment zones. Effects on marine mammals will be limited to temporary displacement from pile installation and removal noise, and effects on prey species will be similarly limited in time and space.

Water Quality—Temporary and localized reduction in water quality will occur as a result of in-water construction activities. Most of this effect will occur during the installation and removal of piles and bedrock removal when bottom sediments are disturbed. The installation and removal of piles and bedrock removal will disturb bottom sediments and may cause a temporary increase in suspended sediment in the project area. During pile extraction, sediment attached to the pile moves vertically through the water column until gravitational forces cause it to slough off under its own weight. The small resulting sediment plume is expected to settle out of the water column within a few hours. Studies of the effects of turbid water on fish (marine mammal prey) suggest that concentrations of suspended sediment can reach thousands of milligrams per liter before an acute toxic reaction is expected (Burton, 1993).

Impacts to water quality from DTH hammers are expected to be similar to those described for pile driving. Impacts to water quality would be localized and temporary and would have negligible impacts on marine mammal habitat. Effects to turbidity and sedimentation are expected to be short-term, minor, and localized. Since the currents are strong in the area, following the completion of sediment-disturbing activities, suspended sediments in the water column should dissipate and quickly return to background levels in all construction scenarios. Turbidity within the water column has the potential to reduce the level of oxygen in the water and irritate the gills of prey fish species in the proposed project area. However, turbidity plumes associated with the project would be temporary and localized, and fish in the proposed project area would be able to move away from and avoid the areas where plumes may occur. Therefore, it is expected that the impacts on prey fish species from turbidity, and therefore on marine mammals, would be minimal and temporary. In general, the area likely impacted by the proposed construction activities is relatively small compared to the available marine mammal habitat in southeast Alaska.

Effects on Prey

Construction activities would produce continuous (*i.e.,* vibratory pile driving) and impulsive (*i.e.,* impact driving) sounds and a both continuous and impulsive sounds from DTH installation. Fish react to sounds that are especially strong and/or intermittent low-frequency sounds. Short duration, sharp sounds can cause overt or subtle changes in fish behavior and local distribution. Hastings and Popper (2005) identified several studies that suggest fish may relocate to avoid certain areas of sound energy. Additional studies have documented effects of pile driving on fish, although several are based on studies in support of large, multiyear bridge construction projects (*e.g.,* Scholik and Yan, 2001, Scholik and Yan, 2002; Popper and Hastings, 2009). Sound pulses at received levels may cause noticeable changes in behavior (Pearson *et al.,* 1992; Skalski *et al.,* 1992). SPLs of sufficient strength have been known to cause injury to fish and fish mortality.

Impacts on marine mammal prey (*i.e.,* fish or invertebrates) of the immediate area due to the acoustic disturbance are possible. The duration of fish or invertebrate avoidance or other disruption of behavioral patterns in this area after pile driving stops is unknown, but a rapid return to normal recruitment, distribution and behavior is anticipated. Further, significantly large areas of fish and marine mammal foraging habitat are available in the nearby vicinity in the Lynn Canal.

The duration of the construction activities is relatively short, with pile driving and removal activities expected

last less than one-year. Each day, construction would occur for no more than 12 hours during the day and pile driving activities would be restricted to daylight hours. The most likely impact to fish from pile driving activities at the project area would be temporary behavioral avoidance of the area. In general, impacts to marine mammal prey species are expected to be minor and temporary due to the short timeframe for the project.

Construction activities, in the form of increased turbidity, have the potential to adversely affect fish in the project area. Increased turbidity is expected to occur in the immediate vicinity (on the order of 10 ft (3 m) or less) of construction activities. However, suspended sediments and particulates are expected to dissipate quickly within a single tidal cycle. Given the limited area affected and high tidal dilution rates any effects on fish are expected to be minor or negligible. In addition, best management practices would be in effect, which would limit the extent of turbidity to the immediate project area.

In summary, given the relatively short daily duration of sound associated with individual pile driving and events and the relatively small areas being affected, pile driving activities associated with the proposed action are not likely to have a permanent, adverse effect on any fish habitat, or populations of fish species. Thus, we conclude that impacts of the specified activity are not likely to have more than short-term adverse effects on any prey habitat or populations of prey species. Further, any impacts to marine mammal habitat are not expected to result in significant or long-term consequences for individual marine mammals, or to contribute to adverse impacts on their populations.

Estimated Take of Marine Mammals

This section provides an estimate of the number of incidental takes proposed for authorization through the proposed IHA, which will inform both NMFS' consideration of ''small numbers,'' and the negligible impact determinations.

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

Authorized takes would primarily be by Level B harassment, as use of the construction equipment (*i.e.,* pile driving) has the potential to result in disruption of behavioral patterns for individual marine mammals. There is also some potential for auditory injury (Level A harassment) to result, primarily for high frequency species and phocids, because predicted auditory injury zones are larger and beyond Haines Borough's capability to reasonably monitor. Auditory injury is unlikely to occur for other species groups, based on the combination of expected occurrence and monitoring capabilities relative to estimated Level A harassment zone sizes. The proposed mitigation and monitoring measures are expected to minimize the severity of the taking to the extent practicable.

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

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

Acoustic Thresholds

NMFS recommends the use of acoustic thresholds that identify the received level of underwater sound above which exposed marine mammals would be reasonably expected to be behaviorally harassed (equated to Level B harassment) or to incur PTS of some degree (equated to Level A harassment).

Level B Harassment—Though significantly driven by received level, the onset of behavioral disturbance from anthropogenic noise exposure is also informed to varying degrees by other factors related to the source or exposure context (*e.g.,* frequency, predictability, duty cycle, duration of the exposure, signal-to-noise ratio, distance to the source), the environment (*e.g.,* bathymetry, other noises in the area, predators in the area), and the receiving animals (hearing, motivation, experience, demography, life stage, depth) and can be difficult to predict (*e.g.,* Southall *et al.,* 2007, Southall *et al.,* 2021, Ellison *et al.,* 2012). Based on what the available science indicates and the practical need to use a threshold based on a metric that is both predictable and measurable for most activities, NMFS typically uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS generally predicts that marine mammals are likely to be behaviorally harassed in a manner considered to be Level B harassment when exposed to underwater anthropogenic noise above root-mean-squared pressure received levels (RMS SPL) of 120 dB (referenced to 1 micropascal (re 1 µPa)) for continuous (*e.g.,* vibratory pile driving, drilling) and above RMS SPL 160 dB re 1 µPa for non-explosive impulsive (*e.g.,* seismic airguns) or intermittent (*e.g.,* scientific sonar) sources. Generally speaking, Level B harassment take estimates based on these behavioral harassment thresholds are expected to include any likely takes by TTS as, in most cases, the likelihood of TTS occurs at distances from the source less than those at which behavioral harassment is likely. TTS of a sufficient degree can manifest as behavioral harassment, as reduced hearing sensitivity and the potential reduced opportunities to detect important signals (conspecific communication, predators, prey) may result in changes in behavior patterns that would not otherwise occur.

Haines Borough's proposed activity includes the use of continuous (vibratory pile driving) and impulsive (impact pile driving) sources, and therefore the RMS SPL thresholds of 120 and 160 dB re 1 µPa are applicable. DTH systems have both continuous and intermittent (impulsive) components as discussed in the Description of Sound Sources section above. When evaluating Level B harassment, NMFS recommends treating DTH as a continuous source and applying the RMS SPL thresholds of 120 dB re 1 µPa.

Level A harassment—NMFS' Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0 of Technical Guidance, 2018) identifies dual criteria to assess auditory injury (Level A harassment) to five different marine mammal groups (based on hearing sensitivity) as a result of exposure to noise from two different

types of sources (impulsive or non-impulsive). The Haines Borough's proposed construction includes the use of impulsive (impact pile driving) and non-impulsive (vibratory pile driving) sources. As described above, DTH includes both impulsive and non-impulsive characteristics. When evaluating Level A harassment, NMFS recommends treating DTH as an impulsive source.

These thresholds are provided in the table below. The references, analysis, and methodology used in the development of the thresholds are described in NMFS' 2018 Technical Guidance, which may be accessed at: *http://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance.*

TABLE 4—THRESHOLDS IDENTIFYING THE ONSET OF PERMANENT THRESHOLD SHIFT

Hearing group	PTS onset acoustic thresholds * (received level)	
	Impulsive	Non-impulsive
Low-Frequency (LF) Cetaceans	*Cell 1:* $L_{pk,flat}$*:* 219 dB; $L_{E,LF,24h}$*:* 183 dB	*Cell 2:* $L_{E,LF,24h}$*:* 199 dB.
Mid-Frequency (MF) Cetaceans	*Cell 3:* $L_{pk,flat}$*:* 230 dB; $L_{E,MF,24h}$*:* 185 dB	*Cell 4:* $L_{E,MF,24h}$*:* 198 dB.
High-Frequency (HF) Cetaceans	*Cell 5:* $L_{pk,flat}$*:* 202 dB; $L_{E,HF,24h}$*:* 155 dB	*Cell 6:* $L_{E,HF,24h}$*:* 173 dB.
Phocid Pinnipeds (PW) (Underwater)	*Cell 7:* $L_{pk,flat}$*:* 218 dB; $L_{E,PW,24h}$*:* 185 dB	*Cell 8:* $L_{E,PW,24h}$*:* 201 dB.
Otariid Pinnipeds (OW) (Underwater)	*Cell 9:* $L_{pk,flat}$*:* 232 dB; $L_{E,OW,24h}$*:* 203 dB	*Cell 10:* $L_{E,OW,24h}$*:* 219 dB.

* Dual metric acoustic thresholds for impulsive sounds: Use whichever results in the largest isopleth for calculating PTS onset. If a non-impulsive sound has the potential of exceeding the peak sound pressure level thresholds associated with impulsive sounds, these thresholds should also be considered.

Note: Peak sound pressure (L_{pk}) has a reference value of 1 µPa, and cumulative sound exposure level (L_E) has a reference value of 1µPa²s. In this table, thresholds are abbreviated to reflect American National Standards Institute standards (ANSI 2013). However, peak sound pressure is defined by ANSI as incorporating frequency weighting, which is not the intent for this Technical Guidance. Hence, the subscript "flat" is being included to indicate peak sound pressure should be flat weighted or unweighted within the generalized hearing range. The subscript associated with cumulative sound exposure level thresholds indicates the designated marine mammal auditory weighting function (LF, MF, and HF cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The cumulative sound exposure level thresholds could be exceeded in a multitude of ways (*i.e.,* varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these acoustic thresholds will be exceeded.

Ensonified Area

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

The sound field in the project area is the existing background noise plus additional construction noise from the proposed project. Marine mammals are expected to be affected via sound generated by the primary components of the project (*i.e.,* impact pile driving, vibratory pile driving and removal, DTH). The maximum (underwater) area ensonified above the thresholds for behavioral harassment referenced above is 20.86 km^2 (12.96 mi^2), and would consist of the entire area of Lutak Inlet (see Figure 20 in the Haines Borough's application). Additionally, vessel traffic and other commercial and industrial activities in the project area may contribute to elevated background noise levels which may mask sounds produced by the project.

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

$$TL = B * \mathrm{Log}_{10}(R_1/R_2),$$

where:

TL = transmission loss in dB
B = transmission loss coefficient
R_1 = the distance of the modeled SPL from the driven pile, and
R_2 = the distance from the driven pile of the initial measurement

This formula neglects loss due to scattering and absorption, which is assumed to be zero here. The degree to which underwater sound propagates away from a sound source is dependent on a variety of factors, most notably the water bathymetry and presence or absence of reflective or absorptive conditions including in-water structures and sediments. Spherical spreading occurs in a perfectly unobstructed (free-field) environment not limited by depth or water surface, resulting in a 6-dB reduction in sound level for each doubling of distance from the source (20*log[range]). Cylindrical spreading occurs in an environment in which sound propagation is bounded by the water surface and sea bottom, resulting in a reduction of 3 dB in sound level for each doubling of distance from the source (10*log[range]). A practical spreading value of 15 is often used under conditions, such as the project site, where water increases with depth as the receiver moves away from the shoreline, resulting in an expected propagation environment that would lie between spherical and cylindrical spreading loss conditions. Practical spreading loss is assumed here.

The intensity of pile driving sounds is greatly influenced by factors such as the type of piles, hammers, and the physical environment in which the activity takes place. In order to calculate the distances to the Level A harassment and the Level B harassment sound thresholds for the methods and piles being used in this project, the applicant and NMFS used acoustic monitoring data from other locations to develop proxy source levels for the various pile types, sizes and methods. The project includes vibratory, impact, and DTH pile installation of steel pipe and sheet piles and vibratory removal of steel pipe piles. Source levels for 36 in steel piles are used as a proxy for 42 in steel piles, as 36 in source levels are higher than those available for 42 in piles. Using these higher values is the more conservative approach for mitigation measures and take estimate calculations. NMFS consulted multiple sources to determine valid proxy source levels for the impact installation of sheet piles, as indicated in table 5. This is the best available data for sheet pile source levels and is based on 24-in sheet piles used for a project in California. Source levels for each pile size and driving method are presented in table 5.

TABLE 5—PROXY SOUND SOURCE LEVELS FOR PILE SIZES AND DRIVING METHODS

Pile size	Method	Proxy source level			Literature source
		dB RMS re 1μPa	dB SEL re 1μPa²sec	dB peak re 1μPa	
16 in	Vibratory	161	N/A	N/A	Navy 2015.
24 in	Vibratory	161	N/A	N/A	Navy 2015.
36 in	Vibratory	166	N/A	N/A	Navy 2015.
42 in	Vibratory	170	N/A	N/A	Illingworth and Rodkin, 2019.
55.5 in sheet pile	Vibratory	162	N/A	N/A	Molnar *et al.* 2020.
36 in	Impact	192	184	211	Navy 2015.
42 in	Impact	192	184	211	Navy 2015.
55.5 in sheet pile	Impact	190	180	205	Caltrans 2015.
42 in	DTH	174	164	194	NMFS 2022.

The ensonified area associated with Level A harassment is more technically challenging to predict due to the need to account for a duration component. Therefore, NMFS developed an optional User Spreadsheet tool to accompany the Technical Guidance that can be used to relatively simply predict an isopleth distance for use in conjunction with marine mammal density or occurrence to help predict potential takes. We note that because of some of the assumptions included in the methods underlying this optional tool, we anticipate that the resulting isopleth estimates are typically going to be overestimates of some degree, which may result in an overestimate of potential take by Level A harassment. However, this optional tool offers the best way to estimate isopleth distances when more sophisticated modeling methods are not available or practical. For stationary sources such as impact or vibratory pile driving and removal and DTH, the optional User Spreadsheet tool predicts the distance at which, if a marine mammal remained at that distance for the duration of the activity, it would be expected to incur PTS. Inputs used in the optional User Spreadsheet tool, and the resulting estimated isopleths, are reported below. Inputs used in the optional User Spreadsheet tool (table 6), and the resulting estimated isopleths and the calculated Level B harassment isopleth (table 7), are reported below. For source levels of each pile please refer to Table 5.

TABLE 6—USER SPREADSHEET INPUT PARAMETERS USED FOR CALCULATING LEVEL A HARASSMENT ISOPLETHS

Pile size and installation method	Spreadsheet tab used	Weighting factor adjustment (kHz)	Number of strikes per pile	Number of piles per day	Activity duration (minutes)
16-in vibratory removal	A.1 Vibratory pile driving	2.5	N/A	4	45
24-in vibratory removal	A.1 Vibratory pile driving	2.5	N/A	1	45
36-in vibratory installation (temporary).	A.1 Vibratory pile driving	2.5	N/A	4	15
36-in vibratory removal (temporary).	A.1 Vibratory pile driving	2.5	N/A	4	15
42-in vibratory installation	A.1 Vibratory pile driving	2.5	N/A	4	45
55-in sheet pile vibratory installation.	A.1 Vibratory pile driving	2.5	N/A	6	30
36-in impact installation (temporary).	E.1 Impact pile driving	2	900	4	N/A
42-in impact installation	E.1 Impact pile driving	2	1,500	4	N/A
55-in sheet pile impact installation.	E.1 Impact pile driving	2	900	6	N/A
42-in DTH installation	E.2 DTH systems	2	324,000	2	N/A

TABLE 7—CALCULATED LEVEL A AND LEVEL B HARASSMENT ISOPLETHS

Activity	Level A harassment zone (m)					Level B harassment zone (m)
	LF-cetaceans	MF-cetaceans	HF-cetaceans	Phocids	Otariids	
16-in vibratory removal	14.2	1.3	21.8	8.6	0.6	5,412
24-in vibratory removal	5.6	0.5	8.3	3.4	0.2	
36-in vibratory installation (temporary)	14.7	1.3	21.8	8.9	0.6	11,659
36-in vibratory removal (temporary)	14.7	1.3	21.8	8.9	0.6	
42-in vibratory installation	42.9	3.8	63.4	26.1	1.8	16,343
55-in sheet pile vibratory installation	16.6	1.5	24.5	10.1	0.7	6,310
36-in impact installation (temporary)	2,734.9	97.3	3,257.7	1,463.6	106.6	1,359
42-in impact installation	3,844.5	136.7	4,579.4	2,057.4	149.8	1,359
55-in sheet pile impact installation	1,939.4	69.0	2,310.1	1,037.9	75.6	1,000
42-in DTH installation	4,046.9	143.9	4,820.5	2,165.7	157.7	39,811

Marine Mammal Occurrence

In this section we provide information about the occurrence of marine mammals, including density or other relevant information which will inform the take calculations.

When available, peer-reviewed scientific publications were used to estimate marine mammal abundance in the project area. Data from monitoring reports from previous projects in Lutak and Skagway were used. However, scientific surveys and resulting data, such as population estimates, densities, and other quantitative information, are lacking for some marine mammal populations and most areas of southeast Alaska, including Lutak Inlet. Therefore, Haines Borough additionally gathered qualitative information from discussions with knowledgeable local people in the Lutak area. Assumptions regarding the size of expected groups of different species, and the frequency of occurrence of those groups, were proposed by Haines Borough on the basis of the aforementioned information. NMFS has reviewed the available information and concurs that these choices are reasonable.

Here we describe how the information provided is synthesized to produce a quantitative estimate of the take that is reasonably likely to occur and proposed for authorization. Since reliable densities are not available, the take numbers are based on the assumed maximum number of animals in a group at a given time and the occurrence of those groups per day multiplied by the duration of each activity. Tables for each species are presented to show the calculation of take during the project. The take calculation for this project is:

Incidental take estimate = number of individuals in a group * groups per day * days of pile-related activity

Humpback Whale

Humpback whale presence in Lutak is irregular year-round. From mid-May through September whales are assumed to occur in groups of two and from October to April in groups of one. It is expected that in early summer (mid-May through July) one group every two days may occur and at all other times of the year one group every 10 days would occur in the project area (Solstice AK, 2023 and Happywhale, 2023). Therefore, using the equation given above, the total number of Level B harassment takes for humpback whales would be 26. Given that 2 percent of the humpback whales in southeast Alaska are expected to be members of the Mexico stock (Wade *et al.,* 2016), one take is assumed to be from the Mexico stock and 25 takes from the Hawaii stock.

The largest Level A harassment zone for humpback whales extends 4,050 m from the noise source (table 9). All construction work would be shut down prior to a humpback whale entering the Level A harassment zone specific to the in-water activity underway at the time. In consideration of the infrequent occurrence of humpback whales in the project area and proposed shutdown requirements, no take by Level A harassment is anticipated or proposed for humpback whales.

Killer Whale

Killer whales occur in the Lutak Inlet year round with higher occurrences in the spring. Group sizes of 15 animals are expected with 1 group every 20 days from mid-March through May and 1 group every 30 days for the remainder of the year (Hart Crowser, Inc. and KPFF Consulting Engineers 2016). There are three stocks of killer whales that may be present in the project area, with the following proportions of overall killer whale occurrence expected: Alaska Residents, 75 percent; West Coast Transients, 13 percent; and Northern Residents, 12 percent (Section 6 of the IHA application). The applicant estimated these occurrence proportions by determining the total number of animals in all three stocks and dividing that number by the number of animals in a given stock. Therefore, with 130 expected total takes by Level B harassment, 103 takes are expected to be from the Alaska Resident stock, 19 takes are expected from the West Coast Transient stock, and 16 takes are expected from the Northern Resident stock.

The largest Level A harassment zone for killer whales extends 150 meters from the noise source (table 9). Killer whales are generally conspicuous and protected species observers (PSO) are expected to detect killer whales and implement a shutdown before the animals enter the Level A harassment zone. Therefore, takes by Level A harassment are not anticipated or proposed to be authorized.

Harbor Porpoise

Harbor porpoise are present year round in the Lynn Canal and are expected to be present in groups of two every 30 days at the project site. Haines Borough requested a total of 29 takes of harbor porpoise for the duration of the project. Of the 29 takes it is expected that 13 of those takes could be by Level A harassment, over 153 days of impact installation of 36-in, 42-in, and 55-in sheet piles and DTH activities. For construction activities that are of short duration and the take estimate was below the expected group size, the expected group size (*e.g.,* two animals) was used as a proxy for take calculations for those activities. The remaining 16 takes would are expected to be by Level B harassment.

Harbor porpoises are known to be an inconspicuous species and are challenging for protected species observers (PSOs) to sight, making any approach to a specific area potentially difficult to detect. The largest Level A harassment zone results from impact driving of 42-in piles, and extends 4,820.5 m from the source for high frequency cetaceans (table 7). We propose a distance of 200 m as an effective shutdown zone, given the difficulty of observing harbor porpoise at greater distances (see Proposed Mitigation section). Therefore, some take by Level A harassment is expected.

Dall's Porpoise

Groups of four Dall's porpoise are expected to occur once every 30 days during the proposed project (Dahlheim *et al.,* 2009), resulting in an estimate of 31 takes by Level B harassment. Although no Dall's porpoise were observed during recent monitoring of other projects in the area, tour boat operators occasionally observe Dall's porpoise in Taiya Inlet (SolsticeAK, 2023). Therefore, the applicant has requested authorization of take as described above. NMFS concurs with this request and proposes to authorize the take.

The largest Level A harassment zone for Dall's porpoise extends 4,820.5 m from the source during DTH installation of 42-in piles (table 7). Although Haines Borough would implement a significantly smaller shutdown zone (*i.e.,* 200-m), given the low likelihood of occurrence of Dall's porpoises in the area take by Level A harassment is not anticipated and is not proposed to be authorized.

Steller Sea Lion

Steller sea lions are frequently observed in the project area. Group sizes vary during seasonal fish runs in the area. Groups of 40 animals per day are expected from mid-March through May when animals frequent the project site, including the Taiya point haulout. At other times of the year groups of 2 animals per day are expected in the project area.

During the impact installation of 36-in and 42-in piles and the DTH installation of 42-in piles, groups of 2 sea lions per day are expected to occur within the respective Level A

harassment zones over 146 days associated with these activities. On this basis, we propose to authorize 292 takes of Steller sea lions by Level A harassment. Given that 1.4 percent of Steller sea lions are members of the ESA listed western DPS in the project area, 4 of the 292 takes by Level A harassment would likely be western DPS individuals. The largest Level A harassment zone for Steller sea lions is 150 m (table 7) but it may be difficult for PSOs to view Steller sea lions at the outer edges of the zone and therefore some take by Level A harassment is expected.

Larger harassment zones associated with Level B harassment would encompass the Taiya point haulout. It is expected that groups of 40 Steller sea lions per day over 75 days of vibratory installation of all pile types, impact installation of 36-in and 42-in piles, and DTH installation of 42-in piles which would equate to 3,000 takes by Level B harassment. At other times of the year when the Taiya point haulout is not used group size would be two sea lions per day. During this period the applicant would complete work over 151 days for vibratory installation of all pile types, impact installation of 36-in and 42-in piles, and DTH installation of 42-in piles which would equate to 302 takes by Level B harassment.

Harbor Seal

Harbor seals are common in the project area year round. The applicant expects groups of 100 animals from March through May when animals are more frequent feeding at the mouth of the Chilkoot River. At other times of the year groups of five animals are expected in the project area (SolsticeAK 2023).

During impact installation of 36-in, 42-in, and 55-in sheet piles and DTH installation of 42-in piles it is expected that one group of five harbor seals every 10 days would occur. Over 153 days of activity 79 total takes by Level A harassment may occur. For construction activities that are of short duration and the take estimate was below the expected group size, the expected group size (*e.g.* five animals) was used as a proxy for take calculations for those activities. The largest Level A harassment zone results from impact driving of 42-in piles, and extends 2,057 m from the source for phocids (table 7). We propose a distance of 200 m as an effective shutdown zone, given the difficulty of observing harbor seals at greater distances (see Proposed Mitigation section). Therefore, take by Level A harassment is expected.

Similar to Steller sea lions the larger Level B harassment zones would encompass the mouth of the Chilkoot River where larger aggregations of harbor seals are known to occur. It is expected that groups of harbor seals of 100 every 10 days over 75 days of vibratory installation of all pile types, impact installation of all pile types, and DTH installation of 42-in piles, which would equate to 750 takes by Level B harassment. During other times of the year the applicant expects groups of five animals every 10 days over a 151 day period for vibratory installation of all pile types, impact installation of 36-in and 42-in piles, and DTH installation of 42-inch piles. This would result in 827 takes by Level B harassment.

TABLE 8—ESTIMATED TAKE BY LEVEL A AND LEVEL B HARASSMENT, BY SPECIES AND STOCK

Common name	Stock	Stock abundance [a]	Level A	Level B	Total proposed take	Proposed take as a percentage
Humpback Whale	Mexico	UKN	0	1	1	N/A
	Hawaii	11,278	0	25	25	0.2
Killer Whale	Alaska Resident	1,920	0	103	103	5.4
	West Coast Transients	349	0	19	19	5.4
	Eastern North Pacific Northern Residents.	302	0	16	16	5.3
Harbor Porpoise	Northern Southeast Alaska	1,619	13	16	29	1.8
Dall's Porpoise	Alaska	UKN	0	31	31	N/A
Steller sea lion	Western DPS	52,932	4	33	37	< 0.1
	Eastern DPS	43,201	288	2,319	2,607	6.0
Harbor Seal	Lynn Canal/Stephens Passage.	13,388	79	827	906	6.8

[a] *Stock or DPS size is Nbest according to NMFS 2022 Final Stock Assessment Reports.*

Proposed Mitigation

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance. NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, and their habitat (50 CFR 216.104(a)(11)).

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

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

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

The following measures would apply to Haines Borough's mitigation requirements:

Implementation of Shutdown Zones—For all pile driving/removal activities, Haines Borough would implement shutdowns within designated zones. The purpose of a shutdown zone is generally to define an area within which

shutdown of activity would occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). Implementation of shutdowns would be used to avoid or minimize incidental Level A harassment takes from vibratory, impact, and DTH pile removal and installation (Table 8). For all pile driving/removal activities, a minimum 10-m shutdown zone must be established. NMFS has recommended shutdown zones of 200 m for high-frequency cetaceans and phocids, despite significantly larger estimated Level A harassment zones, in order to prescribe implementation of a zone that may be reasonably observed under typical conditions for these cryptic species. It is reasonable to expect that these species would be difficult to detect from distances further than 200 m by PSOs (table 9). All other shutdown zones for pile driving and removal activities are based on the Level A harassment zones and therefore vary by pile size and marine mammal hearing group (table 9). The placement of PSOs during all pile driving activities (described in detail in the Monitoring and Reporting section) would ensure the full extent of shutdown zones are visible to PSOs.

TABLE 9—SHUTDOWN ZONES DURING PILE INSTALLATION AND REMOVAL

Activity	Pile size	Minutes or strikes per pile	Piles per day	Shutdown zones (m)				
				LF cetaceans	MF cetaceans	HF cetaceans	Phocids	Otariids
Vibratory Removal	16-in	45 min	4	15	10	30	10	10
	24-in	45 min	1	10				
	36-in (temporary)	15 min	4	15	10	30	10	10
Vibratory Installation	36-in (temporary)	15 min	4	15	10	30	10	10
	42-in	45 min	4	60	10	85	35	10
	55-in sheet pile	30 min	6	20	10	25	10	10
Impact Installation	36-in (temporary)	900 strikes	4	2,735	110	200	200	110
	42-in	1,500 strikes	4	3,845	150			150
	55-in sheet pile	900 strikes	6	1,940	70			80
DTH drilling	42-in	300 min/324,000 strikes	2	4,050	145			160

Establishment of Monitoring Zones—Haines Borough has identified monitoring zones correlated with the larger of the Level B harassment or Level A harassment zones. Monitoring zones provide utility for observing by establishing monitoring protocols for areas adjacent to the shutdown zones. In some cases the calculated monitoring zones are smaller than the Level A shutdown zones as presented in table 10. This is due to the project area being bounded by land to 7,000 m on the western most shore of the inlet and 5,820 m on the eastern shore. Monitoring zones enable observers to be aware of and communicate the presence of marine mammals in the project area outside the shutdown zone and thus prepare for a potential cessation of activity should the animal enter the shutdown zone. PSOs would monitor the entire visible area to maintain the best sense of where animals are moving relative to the zone boundaries defined in tables 9 and 10. Placement of PSOs on the shorelines around Lutak Inlet allow PSOs to observe marine mammals within and near the inlet. The applicant may also voluntarily place a PSO on a skiff in Taiya Inlet if safe conditions allow for such activity.

TABLE 10—MARINE MAMMAL MONITORING ZONE

Activity	Monitoring zone (m)
Vibratory removal of 16-in and 24-in piles	5,425
Vibratory installation and removal of 36-in temporary piles	7,000
Vibratory installation of 42-in piles	7,000
Vibratory installation of 55-in sheet piles	6,310
Impact installation of 36-in temporary piles	*1,360
Impact installation of 42-in piles	*1,360
Impact installation of 55-in sheet piles	1,000
DTH installation of 42-in piles	7,000

** Where Level A shutdown zones are larger than the Level B harassment zones.*

Soft Start—The use of soft-start procedures are believed to provide additional protection to marine mammals by providing warning and/or giving marine mammals a chance to leave the area prior to the hammer operating at full capacity. For impact pile driving, contractors would be required to provide an initial set of strikes from the hammer at reduced energy, with each strike followed by a 30-second waiting period. This procedure would be conducted a total of three times before impact pile driving begins. Soft start would be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer. Soft start is not required during vibratory pile driving and removal activities.

Pre-Activity Monitoring—Prior to the start of daily in-water construction activity, or whenever a break in pile driving/removal of 30 minutes or longer occurs, PSOs would observe the shutdown and monitoring zones for a period of 30 minutes. The shutdown zone would be considered cleared when a marine mammal has not been observed within the zone for that 30-minute period. If a marine mammal is observed within the shutdown zone, a soft-start cannot proceed until the animal has left the zone or has not been observed for 15 minutes. If the monitoring zone has been observed for 30 minutes and marine mammals are not present within the zone, soft-start procedures can commence and work can continue even if visibility becomes impaired within the monitoring zone. When a marine mammal permitted for take by Level B harassment is present in the Level B harassment zone, activities may begin. No work may begin unless the entire shutdown zone is visible to the PSOs. If work ceases for more than 30 minutes, the pre-activity monitoring of both the monitoring zone and shutdown zone would commence.

Based on our evaluation of the applicant's proposed measures, NMFS has preliminarily determined that the

proposed mitigation measures provide the means of effecting the least practicable impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

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

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

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

Visual Monitoring

Monitoring shall be conducted by NMFS-approved observers in accordance with the monitoring plan (Appendix C of the IHA application) and Section 5 of the IHA. Trained observers shall be placed from the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator. Observer training must be provided prior to project start, and shall include instruction on species identification (sufficient to distinguish the species in the project area), description and categorization of observed behaviors and interpretation of behaviors that may be construed as being reactions to the specified activity, proper completion of data forms, and other basic components of biological monitoring, including tracking of observed animals or groups of animals such that repeat sound exposures may be attributed to individuals (to the extent possible).

Monitoring would be conducted 30 minutes before, during, and 30 minutes after pile driving/removal activities. In addition, observers shall record all incidents of marine mammal occurrence, regardless of distance from activity, and shall document any behavioral reactions in concert with distance from piles being driven or removed. Pile driving/removal activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than 30 minutes.

A minimum of one PSO would be on duty during all barge movements and other in-water construction activities and a minimum of three PSOs during all pile driving activities. Locations from which PSOs would be able to monitor for marine mammals are readily available from publicly accessible shore side areas at the project site, Lutak Road at a beach across from Takshanuk Mountain trail, and along the shoreline just south of Tanani Point along Lutak Road. PSOs would monitor for marine mammals entering the harassment zones.

PSOs would scan the waters using binoculars and would use a handheld range-finder device to verify the distance to each sighting from the project site. All PSOs would be trained in marine mammal identification and behaviors and are required to have no other project-related tasks while conducting monitoring. In addition, monitoring would be conducted by qualified observers, who would be placed at the best vantage point(s) practicable to monitor for marine mammals and implement shutdown/delay procedures when applicable by calling for the shutdown to the hammer operator via a radio. Haines Borough would adhere to the following observer qualifications:

(i) PSOs must be independent of the activity contractor (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods;

(ii) One PSO would be designated as the lead PSO or monitoring coordinator and that observer must have prior experience working as an observer;

(iii) Other observers may substitute education (degree in biological science or related field) or training for experience; and

(iv) Haines Borough must submit observer Curriculum Vitaes for approval by NMFS.

Additional recommended observer qualifications include:

- Ability to conduct field observations and collect data according to assigned protocols;
- Experience or training in the field identification of marine mammals, including the identification of behaviors;
- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;
- Writing skills sufficient to prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates and times when in-water construction activities were suspended to avoid potential incidental injury from construction sound of marine mammals observed within a defined shutdown zone; and marine mammal behavior; and
- Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

Reporting

A draft marine mammal monitoring report would be submitted to NMFS within 90 days after the completion of pile driving and removal activities. It would include an overall description of work completed, a narrative regarding marine mammal sightings, and associated PSO data sheets. Specifically, the report must include:

- Dates and times (begin and end) of all marine mammal monitoring;

- Construction activities occurring during each daily observation period, including the number and type of piles driven or removed and by what method (*i.e.,* impact driving) and for each pile or total number of strikes for each pile (impact driving);
- PSO locations during marine mammal monitoring;
- Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;
- Upon observation of a marine mammal, the following information: Name of PSO who sighted the animal(s) and PSO location and activity at time of sighting; time of sighting; identification of the animal(s) (*e.g.,* genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species; distance and bearing of each marine mammal observed relative to the pile being driven for each sighting (if pile driving was occurring at time of sighting); estimated number of animals (min/max/best estimate); estimated number of animals by cohort (adults, juveniles, neonates, group composition, etc.); animal's closest point of approach and estimated time spent within the harassment zone; description of any marine mammal behavioral observations (*e.g.,* observed behaviors such as feeding or traveling), including an assessment of behavioral responses thought to have resulted from the activity (*e.g.,* no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);
- Number of marine mammals detected within the harassment zones, by species; and
- Detailed information about any implementation of any mitigation triggered (*e.g.,* shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.

If no comments are received from NMFS within 30 days, the draft final report would constitute the final report. If comments are received, a final report addressing NMFS comments must be submitted within 30 days after receipt of comments.

Reporting Injured or Dead Marine Mammals

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by the IHA (if issued), such as an injury, serious injury or mortality, Haines Borough would immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS, and the Alaska Regional Stranding Coordinator. The report would include the following information:

- Description of the incident;
- Environmental conditions (*e.g.,* Beaufort sea state, visibility);
- Description of all marine mammal observations in the 24 hours preceding the incident;
- Species identification or description of the animal(s) involved;
- Fate of the animal(s); and
- Photographs or video footage of the animal(s) (if equipment is available).

Activities would not resume until NMFS is able to review the circumstances of the prohibited take. NMFS would work with Haines Borough to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Haines Borough would not be able to resume their activities until notified by NMFS.

In the event that Haines Borough discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.,* in less than a moderate state of decomposition as described in the next paragraph), Haines Borough would immediately report the incident to the Office of Protected Resources, NMFS, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinator. The report would include the same information identified in the paragraph above. Activities would be able to continue while NMFS reviews the circumstances of the incident. NMFS would work with Haines Borough to determine whether modifications in the activities are appropriate.

In the event that Haines Borough discovers an injured or dead marine mammal and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in the IHA (*e.g.,* previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), Haines Borough would report the incident to the Office of Protected Resources, NMFS, and the NMFS Alaska Stranding Hotline and/or by email to the Alaska Regional Stranding Coordinator, within 24 hours of the discovery. Haines Borough would provide photographs, video footage (if available), or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network.

Negligible Impact Analysis and Determination

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.,* population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be ''taken'' through harassment, NMFS considers other factors, such as the likely nature of any impacts or responses (*e.g.,* intensity, duration), the context of any impacts or responses (*e.g.,* critical reproductive time or location, foraging impacts affecting energetics), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with the 1989 preamble for NMFS' implementing regulations (54 FR 40338; September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the baseline (*e.g.,* as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

To avoid repetition, the majority of our analysis applies to all the species listed in table 8, given that many of the anticipated effects of this project on different marine mammal stocks are expected to be relatively similar in nature. Where there are meaningful differences between species or stocks, or groups of species, in anticipated individual responses to activities, impact of expected take on the population due to differences in population status, or impacts on habitat, they are described independently in the analysis below.

Pile driving and removal activities associated with the project as outlined previously, have the potential to disturb or displace marine mammals. Specifically, the specified activities may result in take, in the form of Level A harassment and Level B harassment from underwater sounds generated from

pile driving and removal. Potential takes could occur if individuals of these species are present in zones ensonified above the thresholds for Level A or Level B harassment identified above when these activities are underway.

Take by Level A and Level B harassment would be due to potential behavioral disturbance, TTS, and PTS. No serious injury or mortality is anticipated or proposed for authorization given the nature of the activity and measures designed to minimize the possibility of injury to marine mammals. Take by Level A harassment is only anticipated for harbor porpoise, Steller sea lions, and harbor seal. Take by Level A harassment of the ESA-listed western DPS of Steller sea lions is expected to be a very small portion of the overall DPS (<0.1 percent). Impacts to affected individuals of the western DPS are not expected to result in population-level impacts. The potential for harassment is minimized through the construction method (*i.e.* use of direct pull removal or vibratory methods to the extent practical) and the implementation of the planned mitigation measures (see Proposed Mitigation section).

In addition to the expected effects resulting from Level B harassment, we anticipate that harbor porpoises, Steller sea lions, and harbor seals may sustain some limited Level A harassment in the form of auditory injury. However, animals in these locations that experience PTS would likely only receive slight PTS, *i.e.,* minor degradation of hearing capabilities within regions of hearing that align most completely with the energy produced by pile driving, *i.e.,* the low-frequency region below 2 kHz, not severe hearing impairment or impairment in the regions of greatest hearing sensitivity. If hearing impairment occurs, it is most likely that the affected animal would lose a few decibels in its hearing sensitivity, which in most cases is not likely to meaningfully affect its ability to forage and communicate with conspecifics. As described above, we expect that marine mammals would be likely to move away from a sound source that represents an aversive stimulus, especially at levels that would be expected to result in PTS, given sufficient notice through use of soft start.

The project also is not expected to have significant adverse effects on affected marine mammals' habitat. The project activities would not modify existing marine mammal habitat for a significant amount of time. The activities may cause some fish or invertebrates to leave the area of disturbance, thus temporarily impacting marine mammals' foraging opportunities in a limited portion of the foraging range; but, because of the short duration of the activities, the relatively small area of the habitat that may be affected, and the availability of nearby habitat of similar or higher value, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences. The haulout location at Taiya Point would be affected by the project for foraging Steller sea lions and occasionally harbor seals. Currently, the Taiya Point haulout location is not known to be a pupping location for Steller sea lions or harbor seals but are important areas throughout the year. Steller sea lions and to a lesser extent harbor seals at this haulout would likely result in repeated exposure of the same animals. Repeated exposures of individuals to this pile driving activity could cause Level A and Level B harassment but are unlikely to considerably disrupt foraging behavior or result in significant decrease in fitness, reproduction, or survival for the affected individuals.

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

- No serious injury or mortality is anticipated or authorized;
- Any Level A harassment exposures (*i.e.,* to harbor seals, harbor porpoise, and Steller sea lions, only) are anticipated to result in slight PTS (*i.e.,* of a few decibels), within the lower frequencies associated with pile driving;
- The anticipated incidents of Level B harassment would consist of, at worst, temporary modifications in behavior that would not result in fitness impacts to individuals;
- The ensonifed areas from the project are very small relative to the overall habitat ranges of all species and stocks;
- The lack of anticipated significant or long-term negative effects to marine mammal habitat or any other areas of known biological importance; with the exception of the haulout location at Taiya Point; and
- The proposed mitigation measures are expected to reduce the effects of the specified activity to the level of least practicable adverse impact.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from the proposed activity will have a negligible impact on all affected marine mammal species or stocks.

Small Numbers

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

Table 8 demonstrates the number of animals that could be exposed to the received noise levels that could cause harassment for the proposed work in Lutak Inlet. Our analysis shows that less than 6.8 percent of each affected stock could be taken by harassment. The numbers of animals proposed to be taken for these stocks would be considered small relative to the relevant stock's abundances, even if each estimated taking occurred to a new individual—an extremely unlikely scenario.

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

Unmitigable Adverse Impact Analysis and Determination

In order to issue an IHA, NMFS must find that the specified activity will not have an ''unmitigable adverse impact'' on the subsistence uses of the affected marine mammal species or stocks by Alaskan Natives. NMFS has defined ''unmitigable adverse impact'' in 50 CFR 216.103 as an impact resulting from the specified activity: (1) That is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by (i) causing the marine mammals to abandon or avoid

hunting areas, (ii) directly displacing subsistence users, or (iii) placing physical barriers between the marine mammals and the subsistence hunters, and (2) that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.

In the Haines area sea lions and harbor seals are available for subsistence harvest under the MMPA. Limited subsistence harvests of marine mammals near the community of Haines has occurred in the past, with the most recent recorded/documented harvests of marine mammals in Haines in 2012 and in nearby Klukwan in 2014. The proposed activity will take place in Lutak Inlet, and no activities overlap with current subsistence hunting areas; therefore, there are no relevant subsistence uses of marine mammals adversely impacted by this action. The proposed project is not likely to adversely impact the availability of any marine mammal species or stocks that are commonly used for subsistence purposes or to impact subsistence harvest of marine mammals in the region.

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

Endangered Species Act

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS consults internally whenever we propose to authorize take for endangered or threatened species, in this case with the Alaska Regional Office.

NMFS is proposing to authorize take of Mexico DPS of humpback whales and western DPS of Steller sea lions, which are listed under the ESA.

The Office of Protected Resources has requested initiation of section 7 consultation with the Alaska Regional Office for the issuance of this IHA. NMFS will conclude the ESA consultation prior to reaching a determination regarding the proposed issuance of the authorization.

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to Haines Borough for conducting pile driving and removal activities in, Lutak Alaska from 1-year of the date of issuance of the final IHA, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. A draft of the proposed IHA can be found at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities.*

Request for Public Comments

We request comment on our analyses, the proposed authorization, and any other aspect of this notice of proposed IHA for the proposed action. We also request comment on the potential renewal of this proposed IHA as described in the paragraph below. Please include with your comments any supporting data or literature citations to help inform decisions on the request for this IHA or a subsequent renewal IHA.

On a case-by-case basis, NMFS may issue a one-time, 1-year renewal IHA following notice to the public providing an additional 15 days for public comments when (1) up to another year of identical or nearly identical activities as described in the Description of Proposed Activity section of this notice is planned or (2) the activities as described in the Description of Proposed Activity section of this notice would not be completed by the time the IHA expires and a renewal would allow for completion of the activities beyond that described in the *Dates and Duration* section of this notice, provided all of the following conditions are met:

- A request for renewal is received no later than 60 days prior to the needed renewal IHA effective date (recognizing that the renewal IHA expiration date cannot extend beyond 1-year from expiration of the initial IHA); and
- The request for renewal must include the following:

(1) An explanation that the activities to be conducted under the requested renewal IHA are identical to the activities analyzed under the initial IHA, are a subset of the activities, or include changes so minor (*e.g.,* reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take); and

(2) A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.

Upon review of the request for renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same and appropriate, and the findings in the initial IHA remain valid.

Dated: November 8, 2023.

Shannon Bettridge,

Acting Director, Office of Protected Resources, National Marine Fisheries Service.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XD516]

Marine Mammals and Endangered Species

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

ACTION: Notice; issuance of permits and permit amendments.

SUMMARY: Notice is hereby given that permits and permit amendments have been issued to the following entities under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA), as applicable.

ADDRESSES: The permits and related documents are available for review upon written request via email to *NMFS.Pr1Comments@noaa.gov.*

FOR FURTHER INFORMATION CONTACT: Shasta McClenahan, Ph.D., (Permit No. 27155), Amy Hapeman (Permit No. 22156–05), and Jennifer Skidmore (Permit No. 27459); at (301) 427–8401.

SUPPLEMENTARY INFORMATION: Notices were published in the **Federal Register** on the dates listed below that requests for a permit or permit amendment had been submitted by the below-named applicants. To locate the **Federal Register** notice that announced our receipt of the application and a complete description of the activities, go to *https://www.federalregister.gov* and search on the permit number provided in Table 1 below.