Registered participants joining in-person will be emailed instructions on accessing the designated meeting space.

SUPPLEMENTARY INFORMATION:

Background: The Secretary of Commerce established the REEEAC pursuant to discretionary authority and in accordance with the Federal Advisory Committee Act, as amended (5 U.S.C. 1001 *et seq.*), on July 14, 2010. The REEEAC was re-chartered most recently on May 27, 2022. The REEEAC provides the Secretary of Commerce with advice from the private sector on the development and administration of programs and policies to expand the export competitiveness of U.S. renewable energy and energy efficiency products and services. More information about the REEEAC, including the list of appointed members for this charter, is published online at *http://trade.gov/reeeac.*

On January 25, 2024, the REEEAC will hold the sixth meeting of its current charter term. The Committee will deliberate on approval of several recommendations. The REEEAC will also be briefed on recent ITA accomplishments of relevance to the U.S. renewable energy and energy efficiency industries, including the delegation to COP28, the launch of the Clean Tech Top Export Markets website, and the establishment of the Supply Chain Center. The agenda will be made available by January 22, 2024 upon request to Cora Dickson, and the most current version of the agenda will also be made available on the REEEAC website.

The meeting will be open to the public and will be accessible to people with disabilities. All guests are required to register in advance by the deadline identified under the **DATES** caption. Requests for auxiliary aids must be submitted by the registration deadline. Last minute requests will be accepted but may not be possible to fill.

A limited amount of time before the close of the meeting will be available for oral comments from members of the public attending the meeting. Members of the public attending virtually who wish to speak during the public comment period must give the DFO advance notice in order to facilitate their access. To accommodate as many speakers as possible, the time for public comments will be limited to two to five minutes per person (depending on number of public participants). Individuals wishing to reserve speaking time during the meeting must contact Cora Dickson using the contact information above and submit a brief statement of the general nature of the comments, as well as the name and address of the proposed participant, by 5 p.m. EDT on Monday, January 22, 2024. If the number of registrants requesting to make statements is greater than can be reasonably accommodated during the meeting, the International Trade Administration may conduct a lottery to determine the speakers. Speakers are requested to submit a copy of their oral comments by email to Cora Dickson for distribution to the participants in advance of the meeting.

Any member of the public may submit written comments concerning the REEEAC's affairs at any time before or after the meeting. Comments may be submitted via email to the Renewable Energy and Energy Efficiency Advisory Committee, c/o: Cora Dickson, Designated Federal Officer, Office of Energy and Environmental Industries, U.S. Department of Commerce; *Cora.Dickson@trade.gov.* To be considered during the meeting, public comments must be transmitted to the REEEAC prior to the meeting. As such, written comments must be received no later than 5 p.m. EDT on Monday, January 22, 2024. Comments received after that date will be distributed to the members but may not be considered at the meeting.

Copies of REEEAC meeting minutes will be available within 30 days following the meeting.

Dated: January 3, 2024.

Man K. Cho,

Deputy Director, Office of Energy and Environmental Industries.

[FR Doc. 2024–00194 Filed 1–8–24; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XD284]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the Hydaburg Seaplane Base Refurbishment Project in Hydaburg, Alaska

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

ACTION: Issuance of an incidental harassment authorization.

SUMMARY: In accordance with the regulations implementing the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that NMFS has issued an incidental harassment authorization (IHA) to the Alaska Department of Transportation and Public Facilities (DOT&PF) to incidentally harass marine mammals during construction associated with the Hydaburg Seaplane Base Refurbishment Project in Hydaburg, Alaska.

DATES: This authorization is effective from September 15, 2024 through September 14, 2025.

ADDRESSES: Electronic copies of the application and supporting documents, as well as a list of the references cited in this document, may be obtained online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities.* In case of problems accessing these documents, please call the contact listed below.

FOR FURTHER INFORMATION CONTACT: Reny Tyson Moore, 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.

Summary of Request

On June 28, 2022, NMFS received a request from DOT&PF for an IHA to take marine mammals incidental to the Hydaburg Seaplane Base Refurbishment Project in Hydaburg, Alaska. Following NMFS' review of the application, and multiple discussions between DOT&PF and NMFS, DOT&PF submitted responses to NMFS questions on December 15, 2022 and a revised application on February 22, 2023. The application was deemed adequate and complete on March 13, 2023. DOT&PF's request is for take of nine species of marine mammals by Level B harassment and, for a subset of 6 of these species, Level A harassment. Neither DOT&PF nor NMFS expect serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

Description of Activity

Overview

DOT&PF, in cooperation with the Federal Aviation Administration, is planning maintenance improvements to the existing Hydaburg Seaplane Base as part of the Hydaburg Seaplane Base Refurbishment Project. The existing facility has experienced deterioration in recent years, and DOT&PF has conducted several repair projects. The facility is near the end of its useful life, and replacement of the existing float structures is required to continue safe operation in the future. The in-water portion of the project will include the removal of five existing steel piles and installation of eight permanent steel piles to support replacement of the floating dock structure (Table 1). Up to 10 temporary steel piles will be installed to support permanent pile installation and will be removed following completion of permanent pile installation (Table 1). Activities included as part of the project with potential to affect marine mammals include vibratory removal, down-the-hole (DTH) installation, and vibratory and impact installation of steel pipe piles. Pile installation and removal will occur intermittently over 26 nonconsecutive days within a 2-month construction window, and is anticipated to begin in fall 2024.

TABLE 1—SUMMARY OF PILES TO BE INSTALLED AND REMOVED

Pile diameter and type	Number of piles	Number of rock sockets	Number of tension anchors	Impact strikes per pile	Vibratory duration per pile (minutes)	Rock socket DTH pile installation, duration per pile, minutes (range)	Tension anchor DTH pile installation, duration per pile, minutes (range)	Total duration of activity per pile, hours	Typical production rate in piles per day (range)	Days of installation or removal
Pile Installation										
24″ Steel Plumb Piles (Permanent)	4	4	4	50	15	240 (60–480)	120 (60–240)	6.75	0.5 (0–1)	8
20″ Steel Plumb Piles (Permanent)	4	2	2	50	15	240 (60–480)	120 (60–240)	[1] 0.75/6.75	0.5 (0–1)	8
24″ Steel Piles (Temporary)	10	5	N/A	N/A	15	240 (60–480)	N/A	4.25	2.5 (1–10)	4
Pile Removal										
16″ Steel Cantilevered Piles	5	N/A	N/A	N/A	30	N/A	N/A	0.5	2.5 (2–4)	2
24″ Steel Piles (Temporary)	10	N/A	N/A	N/A	30	N/A	N/A	0.5	2.5 (2–4)	4
Totals	23	11	6	N/A	N/A	N/A	N/A	N/A	N/A	26

[1] Two of the 20-inch plumb piles will include vibratory and impact installation in addition to rock sockets and tension anchors, estimated at 6.75 hours duration total, and two will only use vibratory and impact, estimated at 0.75 hours duration total.

A detailed description of the planned construction project is provided in the **Federal Register** notice for the proposed IHA (88 FR 45774, June 17, 2023). Since that time, no changes have been made to the planned activities. Therefore, a detailed description is not provided here. Please refer to that **Federal Register** notice for the description of the specific activity.

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

Comments and Responses

A notice of NMFS' proposal to issue an IHA to the DOT&PF was published in the **Federal Register** on July 17, 2023 (88 FR 45774). That notice described, in detail, the DOT&PF's activities, the marine mammal species that may be affected by the activities, and the anticipated effects on marine mammals. In that notice, we requested public input on the request for authorization described therein, our analyses, the proposed authorization, and any other aspect of the notice of proposed IHA, and requested that interested persons submit relevant information, suggestions, and comments. This proposed notice was available for a 30-day public comment period.

In the **Federal Register** notice of the proposed IHA, NMFS presented our assessment of DTH systems, which differed from DOT&PF's assessment. Specifically, the DOT&PF and NMFS disagreed about some of the source levels and transmission loss (TL) coefficients that should be used as proxies to estimate the ensonified area resulting from certain DTH activities. NMFS also disagreed with the DOT&PF's assessment that sounds resulting from the DTH installation of 8 inch anchor piles should only be considered as continuous sound sources when calculating Level A and Level B harassment rather than as having both impulsive and continuous components as recommended by NMFS (2022) (*https://media.fisheries.noaa.gov/2022-11/PUBLIC%20DTH%20Basic%20Guidance_November%202022.pdf*). Available data does not support DOT&PF's evaluation. NMFS' recommendations regarding analysis of sound produced through use of DTH techniques is based on the best available science and interpretation of available data by subject matter experts, and is publicly available online. NMFS explained these issues in the notice of the proposed IHA, and specifically

requested public comment on its DTH-related recommendations in context of DOT&PF's alternative interpretation.

During the 30-day public comment period, NMFS received comments from the Marine Mammal Commission (MMC). The MMC expressed support for NMFS' assessment and evaluation of DTH systems. Specifically, the MMC agrees with NMFS that DTH installation of all sized piles, including 8-inch tension anchors, should be considered an impulsive, continuous source and that NMFS should the use proxy source levels recommended by NMFS (2022) instead of those proposed by the DOT&PF to estimate associated ensonified areas. In addition, the MMC agrees with NMFS' determination that applying proxy TL coefficients measured in other locations in Hydaburg is inappropriate, because transmission loss is dependent on sediment characteristics, bathymetry/water depth, and sound speed profiles in a given area. The MMC supports NMFS' decision to require the DOT&PF to use practical spreading loss models (*i.e.,* 15 log R) when calculating ensonified areas resulting from DTH pile installation at Hydaburg, and recommends that NMFS continue to require action proponents to use practical spreading unless site-specific transmission loss data are available from the proposed project site. The comments and recommendations are available online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities.* Please see the comment submission for full details regarding the recommendations and supporting rationale.

Changes From the Proposed IHA to Final IHA

Since the **Federal Register** notice of the proposed IHA was published (88 FR 45774, July 17, 2023), NMFS published the 2022 Alaska and Pacific Stock Assessment Reports (SARs), which provide updates to the humpback whale stock structure and Southeast Alaska harbor porpoise stock structure (Carretta *et al.,* 2023; *Young et al,* 2023). Updates have been made to the species descriptions for these species (see Description of Marine Mammals in the Area of Specified Activities) as well as to our analysis of take (see Estimated Take) and small numbers determinations (see Small Numbers).

In addition, based on the comment letter received from the MMC in support of NMFS' assessment of DTH systems, the Estimated Take section in this notice only considers source levels and transmission loss coefficients recommended by NMFS (2022) for DTH systems as proxies to estimate associated ensonified areas (in contrast to including a discussion regarding the DOT&PF's assessment of DTH systems). Specifically, DTH installation of all sized piles are considered to be an impulsive, continuous source; proxy source levels follow NMFS's recommendations for DTH systems (NMFS, 2022); and transmission loss of sounds produced by DTH systems in the Hydaburg project area are modelled assuming practical spreading loss.

Lastly, a typographical error identified in Table 1 in the **Federal Register** notice of the proposed IHA has been corrected in this **Federal Register** notice. Specifically, the number of estimated days of installation and removal of 24-inch steel piles included in the Table was incorrect. No other changes have been made from the proposed IHA to the final IHA.

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the DOT&PF's 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, referenced here, instead of reprinting the information. Additional information regarding population trends and threats may be found in NMFS' Stock Assessment Reports (SARs; *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 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 expected to occur, 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 stocks managed under the MMPA in this region are assessed in NMFS' U.S. Alaska and Pacific SARs (*e.g.,* Carretta, *et al.,* 2023; 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: *www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments.*

TABLE 2—SPECIES [4] LIKELY IMPACTED BY THE SPECIFIED ACTIVITIES

Common name	Scientific name	Stock	ESA/MMPA status; strategic (Y/N) [1]	Stock abundance (CV, N_{min}, most recent abundance survey) [2]	PBR	Annual M/SI [3]
Order Artiodactyla—Cetacea—Mysticeti (baleen whales)						
Family Balaenopteridae (rorquals):						
Humpback Whale	*Megaptera novaeangliae*	Hawaii	-, -, N	11,278 (0.56, 7,265, 2020).	127	27.09
		Mexico-North Pacific	T, D, Y	918 (0.217, UNK, 2006)	UND	0.57
Minke Whale	*Balaenoptera acutorostrata*	Alaska	-, -, N	N/A (N/A, N/A, N/A)	UND	0

TABLE 2—SPECIES [4] LIKELY IMPACTED BY THE SPECIFIED ACTIVITIES—Continued

Common name	Scientific name	Stock	ESA/ MMPA status; strategic (Y/N) [1]	Stock abundance (CV, N_{min}, most recent abundance survey) [2]	PBR	Annual M/SI [3]
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
Killer Whale	*Orcinus orca*	Eastern Northern Pacific Northern Resident.	-, -, N	302 (N/A, 302, 2018)	2.2	0.2
Killer Whale	*Orcinus orca*	West Coast Transient	-, -, N	349 (N/A, 349, 2018)	3.5	0.4
Pacific White-Sided Dolphin	*Lagenorhynchus obliquidens*	N Pacific	-, -, N	26,880 (N/A, N/A, 1990)	UND	0
Family Phocoenidae (porpoises):						
Dall's Porpoise	*Phocoenoides dalli*	Alaska	-, -, N	UND (UND, UND, 2015)	UND	37
Harbor Porpoise	*Phocoena phocoena*	Southern Southeast Alaska Inland Waters.	-, -, Y	890 (0.37, 610, 2019)	6.1	7.4
Order Carnivora—Pinnipedia						
Family Otariidae (eared seals and sea lions):						
Steller Sea Lion	*Eumetopias jubatus*	Eastern	-, -, N	43,201 (N/A, 43,201, 2017).	2,592	112
Family Phocidae (earless seals):						
Harbor Seal	*Phoca vitulina*	Dixon/Cape Decision	-, -, N	23,478 (N/A, 21,453, 2015).	644	69
Northern Elephant Seal	*Mirounga angustirostris*	CA Breeding	-, -, N	187,386 (N/A, 85,369, 2013).	5,122	13.7

[1] 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.

[2] NMFS marine mammal stock assessment reports online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region/.* CV is coefficient of variation; N_{min} is the minimum estimate of stock abundance. In some cases, CV is not applicable (N/A).

[3] 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, ship strike). Annual human caused mortality and serious injury (M/SI) often cannot be determined precisely and is in some cases presented as a minimum value or range.

[4] 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://marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies/;* Committee on Taxonomy (2022)).

A detailed description of the species likely to be affected by the construction project, including a brief introduction to the affected stock as well as available information regarding population trends and threats, and information regarding local occurrence, were provided in the **Federal Register** notice for the proposed IHA (88 FR 41920, June 28, 2023). Since that time, the structure of the harbor porpoise and humpback whale stocks have been updated; therefore, a detailed description of those species updated stock structure is provided here. Please refer to the **Federal Register** notice of the proposed IHA (88 FR 41920, June 28, 2023) for the full description for all species. Please also refer to NMFS' website (*https://www.fisheries.noaa.gov/find-species*) for generalized species accounts.

Harbor Porpoise

In the 2022 Alaska SAR, stock structure was revised for the Southeast Alaska harbor porpoise stock, which was split into three stocks: the Northern Southeast Alaska Inland Waters, Southern Southeast Alaska Inland Waters, and Yakutat/Southeast Alaska Offshore Waters harbor porpoise stocks (Young *et al.,* 2023). 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 Hydaburg are assumed to be members of the Southern Southeast Alaska Inland Waters stock based on the geographical range of the stock, which encompasses Sumner Strait, including areas around Wrangell and Zarembo Islands, Clarence Strait, and adjacent inlets and channels within the inland waters of Southeast Alaska north-northeast of Dixon Entrance.

Humpback Whale

The 2022 Alaska and Pacific SARs include an update to the humpback whale stock structure which modifies the previously MMPA-designated humpback stocks to align more closely with the ESA-designated distinct population segments (DPSs) (Caretta *et al.,* 2023; Young *et al.,* 2023). Specifically, the three existing 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 (Carretta *et al.,* 2023; Young *et al.,* 2023). In the notice of the proposed IHA, NMFS assumed that humpbacks in the proposed action area were members of the Central North Pacific Stock. Based on these new delineations, humpback whales in the proposed action area are now assumed to be members of either the Hawaii stock or the Mexico-North Pacific stock.

The Hawaii stock consists of one demographically independent population (DIP) (Hawaii-Southeast Alaska/Northern British Columbia DIP) and the Hawaii-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, 2019; NMFS, 2022b; NMFS 2023). The

DIP is delineated based on two strong lines of evidence: genetics and movement data (Wade *et al.,* 2021). Whales in the Hawaii-Southeast Alaska/Northern British Columbia DIP winter off Hawaii 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 Hawaii have been delineated as the Hawaii-North Pacific unit (Wade *et al.,* 2021). There are a small number of whales that migrate between Hawaii 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 Hawaii stock of humpback whales is equivalent to the Hawaii DPS of humpback whales, which is not listed under the ESA (Bettridge *et al.,* 2015; Wade *et al.,* 2021). Humpback whales were previously considered to be depleted species-wide under the MMPA solely on the basis of the species' ESA listing. After the evaluation of the listing status of DPSs of humpback whales, humpback whale DPSs that are not listed as threatened or endangered were not considered to have depleted status under the MMPA (81 FR 62259, September 8, 2016). However, because the Central North Pacific stock, which is what humpback whales in Hydaburg were presumed to be members of in the notice of the proposed IHA, included some whales from the ESA-listed Mexico and Western North Pacific DPSs, the stock was considered to be endangered and depleted, and as a result, was classified as a strategic stock. The newly defined Hawaii stock of humpback whales does not include whales from any listed DPSs and, therefore, is not currently considered depleted under the MMPA, and is also not a strategic stock due to its ESA status.

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, 2019; NMFS, 2022c; NMFS, 2023a). 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). The Mexico-North Pacific stock of humpback whales is one of two stocks that make up the ''Mexico DPS'' of humpback whales, which are listed as threatened under the ESA (Bettridge *et al.* 2015; Martien *et al.,* 2021), and is therefore considered ''depleted'' and ''strategic'' under the MMPA.

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 or hear over the same frequency range (*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.
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 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 *et al.,* 2013).

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

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

The underwater noise produced by the DOT&PF's construction activities has the potential to result in behavioral harassment of marine mammals in the vicinity of the survey area. The **Federal Register** notice of the proposed IHA (88 FR 45774, July 17, 2023) included a discussion of the effects of anthropogenic noise on marine mammals and the potential effects of underwater noise from the DOT&PF' construction activities on marine mammals and their habitat. That information and analysis is incorporated by reference into this final IHA determination and is not repeated here; please refer to the notice of the proposed IHA (88 FR 45774, July 17, 2023).

Estimated Take

This section provides an estimate of the number of incidental takes authorized through the 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 will primarily be by Level B harassment, as use of the acoustic source (*i.e.,* vibratory pile driving, impact pile driving, and DTH systems) has the potential to result in disruption of behavioral patterns for individual marine mammals. There is also some potential for auditory (Level A harassment) to result, primarily for mysticetes and high frequency species and phocids because predicted auditory injury zones are larger than for mid-frequency species and otariids. Auditory injury is unlikely to occur for mid-frequency species or otariids. The mitigation and monitoring measures are expected to minimize the severity of the taking to the extent practicable. As described previously, no serious injury or mortality is anticipated or authorized for this activity. Below we describe how the 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 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, 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 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.

The DOT&PF's activity includes the use of continuous (vibratory pile driving) and intermittent (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, non-impulsive, and impulsive components. 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) (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 DOT&PF's 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.

The thresholds used to identify the onset of PTS are provided in Table 4. The references, analysis, and methodology used in the development of the thresholds are described in NMFS' 2018 Technical Guidance, which may be accessed at: *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.

TABLE 4—THRESHOLDS IDENTIFYING THE ONSET OF PERMANENT THRESHOLD SHIFT—Continued

Hearing group	PTS onset acoustic thresholds * (received level)	
	Impulsive	Non-impulsive
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 NMFS' 2018 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 project. Marine mammals are expected to be affected via sound generated by the primary components of the project (*i.e.,* impact pile installation, vibratory pile installation, vibratory pile removal, and DTH).

Sound Source Levels of Construction Activities—The intensity of pile driving sounds is greatly influenced by factors such as the type of piles (material and diameter), hammer type, and the physical environment (*e.g.,* sediment type) in which the activity takes place (Table 5). A description of the assessment and appropriateness of proxy sound source levels and TL measurements for the DOT&PF's activities can be found in the notice of proposed IHA (88 FR 45774, July 17, 2023). This includes a discussion regarding the analyses of noise from DTH systems that follows NMFS' recommendations (*i.e., https://media.fisheries.noaa.gov/2022-11/PUBLIC%20DTH%20Basic%20Guidance_November%202022.pdf;* NMFS, 2022a). Please refer to the notice of the proposed IHA (88 FR 45774, July 17, 2023) for full details.

TABLE 5—SUMMARY OF UNATTENUATED IN-WATER PILE DRIVING PROXY LEVELS

[At 10 m]

Pile type	Installation method	Peak SPL (dB re 1 µPa)	RMS SPL (dB re 1 µPa)	SEL_{ss} (dB re 1 µPa² sec)	Reference (levels)
16-inch steel piles	Vibratory hammer	NA	158	NA	CALTRANS (2020).
20-inch steel piles	Vibratory hammer	NA	161	NA	Navy (2015).
24-inch steel piles	Vibratory hammer	NA	161	NA	Navy (2015).
20-inch steel piles	Impact hammer	208	187	176	CALTRANS (2020).
24-inch steel piles	Impact hammer	208	193	178	CALTRANS (2020).
8-inch tension anchors	DTH system	170	156	144	Reyff and Heyvaert (2019); Reyff (2020).
20-inch rock sockets	DTH system	184	167	159	Heyvaert and Reyff (2021).
24-inch rock sockets	DTH system	184	167	159	Heyvaert and Reyff (2021).

Notes: NMFS conservatively assumes that noise levels during vibratory pile removal are the same as those during installation for the same type and size pile; all SPLs are unattenuated and represent the SPL referenced at a distance of 10 m from the source; NA = Not applicable; dB re 1 µPa = decibels (dB) referenced to a pressure of 1 micropascal.

Estimated Harassment Isopleths—All Level B harassment isopleths are reported in Table 7 considering RMS SPLs and the default TL coefficient for practical spreading loss (*i.e.,* 15*Log10(range)). Land forms (including causeways, breakwaters, islands, and other land masses) impede the transmission of underwater sound and create shadows behind them where sound from construction is not audible. At Hydaburg, Level B harassment isopleths from the project will be blocked by Sukkwan Island, Spook Island, Mushroom Island, and the coastline along Prince of Wales Island both southeast and northwest of the project site. The maximum distance that a harassment isopleth can extend due to these land masses is 5,162 m.

The ensonified area associated with Level A harassment is 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 (2018) 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 from impact pile driving, vibratory pile driving, 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 are reported in Table 6 and the resulting estimated isopleths are reported in Table 7.

TABLE 6—NMFS USER SPREADSHEET INPUTS

	Vibratory pile driving				Impact pile driving		DTH	
	16-inch steel piles	20-inch steel piles	24-inch steel piles		20-inch steel piles	24-inch steel piles	20- and 24-inch rock socket	8-inch tension anchor
	Removal	Installation/ removal	Installation	Removal	Installation	Installation	Installation	Installation
Spreadsheet Tab Used.	A.1) Non-Impul, Stat, Cont.	A.1) Non-Impul, Stat, Cont.	A.1) Non-Impul, Stat, Cont.	A.1) Non-Impul, Stat, Cont.	E.1) Impact pile driving.	E.1) Impact pile driving.	E.2) DTH Systems.	A.1) DTH Systems.
Source Level (SPL).	158 dB RMS	161 dB RMS	161 dB RMS	161 dB RMS	176 dB SEL	178 dB SEL	159 dB RMS	144 dB RMS.
Transmission Loss Coefficient.	15	15	15	15	15	15	15	15.
Weighting Factor Adjustment (kHz).	2.5	2.5	2.5	2.5	2	2	2	2.
Time to install/remove single pile (minutes).	30	15/30 [1]	15/30 [1]	30			60–480 [2]	60–240.[2]
Number of strikes per pile.					50	50	15	15.
Piles per day	2	2/10 [1]	2/10 [1]	2	1/2 [1]	1/2 [1]	1	1.
Distance of sound pressure level measurement (m).	10	10	10	10	10	10	10	10.

[1] A maximum scenario was calculated for this activity.
[2] A range of scenarios was calculated for this activity.

TABLE 7—DISTANCES TO LEVEL A HARASSMENT, BY HEARING GROUP, AND DISTANCES AND AREAS OF LEVEL B HARASSMENT THRESHOLDS PER PILE TYPE AND PILE DRIVING METHOD

Activity	Pile size	Minutes (min) or strikes per pile	Piles per day	Level A harassment distance (m)					Level B harassment distance (m) all hearing groups	Level B harassment area (km^2) all hearing groups
				LF	MF	HF	PW	OW		
Vibratory Installation	20- and 24-inch	15 min	2	5	1	7	3	1	[3] 5,412	[4] 4.34
		30 [1] min	[1] 10	20	2	30	13	1		
Vibratory Removal	16-inch	30 min	2	5	1	7	3	1	3,415	3.90
	24-inch	30 min	2	7	1	11	5	1	[3] 5,412	[4] 4.34
Impact Installation	20-inch	50 strikes	1	47	2	56	25	2	1,585	2.14
		50 [1] strikes	[1] 2	74	3	88	40	3		
	24-inch	50 strikes	1	63	3	75	34	3	631	0.65
		50 [1] strikes	[1] 2	100	4	119	54	4		
DTH (Rock Socket) [2]	20- and 24-inch	60 min	1	359	13	427	192	14	[3] 13,594	[4] 4.34
		120 min	1	569	21	678	305	23		
		80 min	1	746	27	888	399	29		
		240 min	1	903	33	1,076	484	36		
		300 min	1	1,048	38	1,249	561	41		
		360 min	1	1,184	43	1,410	634	47		
		420 min	1	1,312	47	1,563	702	52		
		480 min	1	1,434	51	1,708	768	56		
DTH (Tension Anchor) [2]	8-inch	60 min	1	36	2	43	20	2	2,512	3.07
		120 min	1	57	2	68	31	3		
		180 min	1	75	3	89	40	3		
		240 min	1	91	4	108	4	4		
		300 min	1	105	4	125	57	5		
		360 min	1	119	5	141	64	5		
		420 min	1	132	5	157	71	6		
		480 min	1	144	6	171	77	6		

[1] A maximum scenario was calculated for this activity.
[2] A range of scenarios was calculated for this activity.
[3] Harassment distances will be truncated where appropriate to account for land masses, to a maximum distance of 5,162 m.
[4] Harassment areas are truncated where appropriate to account for land masses, to a maximum area of 4.34 km^2.

Marine Mammal Occurrence and Take Estimation

In this section we provide information about the occurrence of marine mammals, including density or other relevant information that will inform the take calculations. We also describe how this information is synthesized to produce a quantitative estimate of the take that is reasonably likely to occur and is authorized. Although construction is currently planned to begin in fall 2023, unexpected delays associated with construction can occur. To account for this uncertainty, the following exposure estimates assume that construction will occur during the periods of peak abundance for those species for which abundance varies seasonally.

Steller Sea Lion

No density or abundance numbers exist for Steller sea lions in the action area, and they are not known to regularly occur near Hydaburg. However, in context of a lack of local data, the DOT&PF conservatively estimated that during peak salmon runs, 6 groups of 10 individuals could be exposed to project-related underwater noise each week during pile installation and removal activities, for a total of 240 exposures (4 weeks * 60 sea lions per week = 240 total exposures).

The largest Level A harassment zone for Steller sea lions is 59 m (Table 7). Due to the small Level A harassment zones (Table 7) and the implementation of shutdown zones, which will be larger than Level A harassment zones (described below in the Mitigation section), NMFS has determined that take by Level A harassment is not anticipated for Steller sea lions. Therefore, NMFS authorizes all 240 estimated exposures as takes by Level B harassment. Takes by Level A harassment for Steller sea lions are not authorized.

Harbor Seal

Up to six known harbor seal haulouts are located near the project area; however, they are all located outside of the estimated harassment zones, with the closest haulout located just over 4.5 km southeast of the project site, but blocked by a land shadow (see Figure 4–2 in the DOT&PF's application). Within the project area, harbor seals remain relatively rare as described by local residents. The DOT&PF conservatively estimated that up to 8 harbor seals could be within estimated harassment zones each day during pile installation and removal activities, for a total of 208 exposures (26 days * 8 seals per day = 208 total exposures).

The largest Level A harassment zone for harbor seals is 768 m (Table 7). There are no known harbor seal haulouts within this distance, however, it is possible that harbor seals may approach and enter within this distance for sufficient duration to incur PTS. Further, the largest practicable shutdown zone that the DOT&PF can implement for harbor seals is 400 m (described below in the Mitigation section). To account for this difference, NMFS authorizes additional takes by Level A harassment, as compared with the DOT&PF's request of 48 takes by Level A harassment, which assumed smaller Level A harassment isopleths based on their assessment of DTH systems. Additional takes were determined by calculating the ratio of the largest Level A harassment area for 20- and 24-inch (50.8- and 60.96-cm) DTH activities (*i.e.,* 0.89 km^2 for a Level A harassment distance of 768 m) minus the area of the shutdown zone for harbor seals (*i.e.,* 0.27 km^2 for a shutdown zone distance of 400 m) to the area of the Level B harassment isopleth (4.34 km^2 for a Level B harassment distance of 5,162 m) (*i.e.,* (0.89 $km^2 - 0.27$ km^2)/4.34 km^2 = 0.14). We then multiplied this ratio by the total number of estimated harbor seal exposures to determine additional take by Level A harassment (*i.e.,* 0.14 * 208 exposures = 29.12 takes, rounded up to 30 takes). The total take by Level A harassment was then calculated as the take originally requested by the DOT&PF plus the additional take calculated by NMFS (*i.e.,* 48 + 30), for a total of 78 takes by Level A harassment. Takes by Level B harassment were calculated as the number of estimated harbor seal exposures minus the amount of take by Level A harassment (*i.e.,* 208 − 78). Therefore, NMFS authorizes 78 takes by Level A harassment and 130 takes by Level B harassment for harbor seals, for a total of 208 takes.

Northern Elephant Seal

Northern elephant seal abundance throughout coastal southeast Alaska is low, and anecdotal reports have not included northern elephant seals near the project area. However, northern elephant seals have been observed elsewhere in southeast Alaska; therefore, this species could occur near the project area. To account for this possibility, the DOT&PF estimated that one northern elephant seal could be within estimated harassment zones each week during pile installation and removal activities, for a total of four exposures (4 weeks * 1 northern elephant seal each week = 4 total exposures).

The largest practicable shutdown zone the DOT&PF can implement for northern elephant seals (400 m) (described below in the Mitigation section) is smaller than the Level A harassment isopleths that result from 240 or minutes more of 20- and 24-inch (50.8- and 60.96-cm) DTH rock socket installation (Table 7). To account for this difference, NMFS followed the same method as described above for harbor seals to calculate take by Level A harassment for northern elephant seals. This was achieved by calculating the ratio of the largest Level A harassment area for 20- and 24-inch (50.8- and 60.96-cm) DTH activities (*i.e.,* 0.89 km^2 for a Level A harassment distance of 768 m) minus the area of the shutdown zone for elephant seals (*i.e.,* 0.27 km^2 for a shutdown zone distance of 400 m) to the area of the Level B harassment isopleth (4.34 km^2 for a Level B harassment distance of 5,162 m) (*i.e.,* (0.89 $km^2 - 0.27$ km^2)/4.34 km^2 = 0.14), and by multiplying this ratio by the total number of estimated northern elephant seal exposures (*i.e.,* 0.14 * 4 exposures = 0.56 takes, rounded up to 1 take by Level A harassment). Takes by Level B harassment were calculated as the number of estimated northern elephant exposures minus the amount of authorized take by Level A harassment (*i.e.,* 4 − 1). Therefore, NMFS authorizes one take by Level A harassment and three takes by Level B harassment for northern elephant seals, for a total of four takes.

Harbor Porpoise

There have been no systematic studies or observations of harbor porpoises specific to Hydaburg or Sukkwan Strait, and sightings of harbor porpoises have not been described in this region by local residents. As such, there is limited potential for them to occur in the project area, but they could occur in low numbers as individuals have been observed in southern inland waters of southeast Alaska. Therefore, the DOT&PF estimated that up to two harbor porpoises could be within estimated harassment zones each day during pile installation and removal activities, for a total of 52 exposures (26 days * 2 porpoises per day = 52 exposures).

Harbor porpoises are small, lack a visible blow, have low dorsal fins, an overall low profile, and a short surfacing time, making them difficult to observe (Dahlheim *et al.,* 2015). These characteristics likely reduce the identification and reporting of this species. For these reasons, and based off

of their assessment of DTH systems, the DOT&PF requested that eight takes by Level A harassment be authorized for harbor porpoises (4 weeks * 2 harbor porpoise per week = 8 takes by Level A harassment).

The maximum Level A harassment isopleth estimated by NMFS for harbor porpoises is 1,708 m, which is larger than what the DOT&PF analyzed. The largest practicable shutdown zone that the DOT&PF can implement for harbor porpoises is 500 m (described below in the Mitigation section). To account for this difference and the increased possibility of harbor porpoises occurring outside of the shutdown zone and in the Level A harassment zone long enough to incur PTS, NMFS authorizes additional takes by Level A harassment, as compared with the DOT&PF's request. Additional takes were determined by calculating the ratio of the largest Level A harassment area for 20- and 24-inch (50.8- and 60.96-cm) DTH activities (*i.e.,* 2.25 km^2 for a Level A harassment distance of 1,708 m minus the area of the shutdown zone for harbor porpoises (*i.e.,* 0.42 km^2 for a shutdown zone distance of 500 m) to the area of the Level B harassment isopleth (4.34 km^2 for a Level B harassment distance of 5,162 m) (*i.e.,* (2.25 $km^2 - 0.42$ km^2)/ 4.34 km^2 = 0.42). We then multiplied this ratio by the total number of estimated harbor porpoise exposures to determine additional take by Level A harassment (*i.e.,* 0.42 * 8 exposures = 3.36 takes, rounded up to 4 takes). The total take by Level A harassment was then calculated as the take originally requested by the DOT&PF plus the additional take calculated by NMFS (*i.e.,* 8 + 4), for a total of 12 takes by Level A harassment. Takes by Level B harassment were calculated as the number of estimated harbor porpoise exposures minus the amount of take by Level A harassment (*i.e.,* 52 − 12). Therefore, NMFS authorizes 12 takes by Level A harassment and 40 takes by Level B harassment for harbor seals, for a total of 52 takes.

Dall's Porpoise

Dall's porpoises are not expected to occur in Sukkwan Strait because the shallow water habitat of the bay is atypical of areas where Dall's porpoises usually occur. However, recent research indicates that Dall's porpoises may opportunistically exploit nearshore habitats where predators, such as killer whales, are absent. Therefore, the DOT&PF anticipates that one large Dall's porpoise pod (15 individuals) could be within the estimated harassment zones during in-water construction, for a total of 15 possible exposures.

Dall's porpoises typically appear in larger groups and exhibit behaviors that make them more visible and thus easier to observe at distance. Based on this assumption, the DOT&PF did not request any takes by Level A harassment for this species. However, the maximum Level A harassment zone is 1,708 m, which is larger than what the DOT&PF analyzed. The largest practicable shutdown zone that the DOT&PF can implement for Dall's porpoises during this project is 500 m (described below in the Mitigation section). To account for this difference and the increased possibility of Dall's porpoises occurring outside of the shutdown zone and in the Level A harassment zones for sufficient duration to incur PTS, NMFS adds takes by Level A harassment, as compared with the DOT&PF's request. Because Dall's porpoises typically occur in groups, NMFS authorizes 15 takes (*i.e.,* one large pod) by Level A harassment in addition to the 15 takes by Level B harassment that the DOT&PF requested, for a total of 30 takes. This will help to ensure that the DOT&PF have enough takes to account for the possibility of one large pod occurring in either the Level A or the Level B harassment zone.

Pacific White-Sided Dolphin

Pacific white-sided dolphins do not generally occur in the shallow, inland waterways of southeast Alaska. There are no records of this species occurring in Sukkwan Strait, and it is uncommon for individuals to occur in the project area. However, recent fluctuations in distribution and abundance decrease the certainty in this prediction. Therefore, the DOT&PF conservatively estimated that one large group (92 individuals) of Pacific white-sided dolphins could be within estimated harassment zones during the in-water construction.

The largest Level A harassment zone estimated by NMFS for Pacific white-sided dolphins is 51 m. Due to the small Level A harassment zones (Table 7) and the implementation of shutdown zones, which will be larger than Level A harassment zones (described below in the Mitigation section), take by Level A harassment is not anticipated for Pacific white-sided dolphins. Therefore, NMFS authorizes all 92 estimated exposures as takes by Level B harassment. Takes by Level A harassment for Pacific white-sided dolphins are not authorized.

Killer Whale

Killer whales are observed infrequently throughout Sukkwan Strait, and their presence near Hydaburg is unlikely. However, anecdotal local information suggests that a pod may be seen in the project area every few months. Therefore, the DOT&PF estimate that one killer whale pod of up to 15 individuals may be within estimated harassment zones once during the pile installation and removal activities (15 total exposures).

The largest Level A harassment zone for killer whales is 51 m (Table 7). Because killer whales are unlikely to enter Sukkwan Strait and are relatively conspicuous, it is unlikely they will approach this distance for sufficient duration to incur PTS. Due to the small Level A harassment zones (Table 7) and the implementation of shutdown zones, which will be larger than Level A harassment zones (described below in the Mitigation section), take by Level A harassment is not anticipated for killer whales. Therefore, NMFS authorizes all 15 estimated exposures as takes by Level B harassment. Takes by Level A harassment for killer whales are not authorized.

Humpback Whale

Use of Sukkwan Strait by humpback whales is common but intermittent and dependent on the presence of prey fish. Based on anecdotal evidence from local residents, the DOT&PF predicts that four groups of two whales, up to eight individuals per week, may be within estimated harassment zones each week during the 4 weeks of the pile installation and removal activities, for a total of 32 exposures (8 per week * 4 weeks = 32 total exposures). Wade (2021) estimated that approximately 2.4 percent of humpback whales in southeast Alaska are members of the Mexico-North Pacific stock, while all others are members of the Hawaii stock. Therefore, the DOT&PF estimates that 1 of the exposures (32 whales * 0.024 = 0.77 rounded up to 1) will be of an individual from the Mexico stock individuals and 31 exposures will be of individuals from the Hawaii stock.

Due to the long duration of DTH piling that is anticipated, and the potential for humpback whales to enter the Level A harassment zones from around obstructions or landforms near the project area, the DOT&PF requested that NMFS authorize 4 takes by Level A harassment (equivalent to two groups of two individuals) of humpback whales. Due to the small percentage of humpback whales that may belong to the Mexico-North Pacific stock in southeast Alaska, the DOT&PF assumes that all takes by Level A harassment will be attributed to Hawaii DPS whales.

The largest Level A harassment zone for humpback whales is 1,435 m (Table 7), which is larger than what the

DOT&PF analyzed. The largest practicable shutdown zone that the DOT&PF can implement for humpback whales during this project is 1,000 m (described below in the Mitigation section). To account for this difference and the increased possibility of humpback whales occurring outside of the shutdown zone and in the Level A harassment zone long enough to incur PTS, NMFS added additional takes by Level A harassment, compared with the DOT&PF's request.

NMFS calculated additional takes by Level A harassment by determining the ratio of the largest Level A harassment area for 20- and 24-inch (50.8- and 60.96-cm) DTH activities (*i.e.,* 2.01 km^2 for a Level A harassment distance of 1,435 m) minus the area of the shutdown zone for humpback whales (*i.e.,* 1.34 km^2 for a shutdown zone distance of 1,000 m) to the area of the Level B harassment isopleth (4.34 km^2 for a Level B harassment distance of 5,162 m) (*i.e.,* (2.01 $km^2 - 1.34$ km^2)/4.34 km^2 = 0.15). We then multiplied this ratio by the total number of estimated humpback whales exposures to determine additional take by Level A harassment (*i.e.,* 0.15 * 32 exposures = 4.80 takes, rounded up to 5 takes). The total take by Level A harassment was then calculated as the take originally requested by the DOT&PF plus the additional take calculated by NMFS (*i.e.,* 4 + 5), for a total of 9 takes by Level A harassment. Takes by Level B harassment were calculated as the number of estimated humpback whale exposures minus the amount of take by Level A harassment (*i.e.,* 32 − 9). Therefore, NMFS authorizes 9 takes by Level A harassment and 23 takes by Level B harassment for humpback whales, for a total of 32 takes. Given that approximately 2.4 percent of humpback whales in southeast Alaska are members of the Mexico-North Pacific stock, NMFS assumes that one of the takes by Level B harassment may be attributed to a humpback whale from the Mexico-North Pacific stock (32 * 2.4 percent = 0.77, rounded up to 1 take). All other takes by Level B harassment and all takes by Level A harassment (*i.e.,* 31) are assumed to be attributed to humpback whales from the Hawaii stock.

Minke Whale

Minke whale abundance throughout southeast Alaska is low, and anecdotal reports have not included minke whales near the project area. However, minke whales are distributed throughout a wide variety of habitats and have been observed elsewhere in southeast Alaska; therefore, this species could occur near the project area. NMFS has previously estimated that three individual minke whales could occur near Metlakatla every 4 months during a similar activity (86 FR 43190, August 6, 2021). Therefore, DOT&PF conservatively estimated that up to three minke whales may be exposed to project-related underwater noise during the pile installation and removal activities.

Due to the low likelihood of minke whale occurrence near the project site, the DOT&PF did not request any takes by Level A harassment for this species. However, the maximum Level A harassment isopleth estimated by NMFS for minke whales is 1,435 m, which is larger than what the DOT&PF analyzed. The largest practicable shutdown zone that the DOT&PF can implement for minke whales during this project is 1,000 m (described below in the Mitigation section). To account for this difference and the increased possibility of minke whales occurring outside of the shutdown zone and within the Level A harassment zone long enough to incur PTS, NMFS added takes by Level A harassment to the DOT&PF's request.

NMFS calculated additional takes by Level A harassment by determining the ratio of the largest Level A harassment area for 20- and 24-inch (50.8- and 60.69-cm) DTH activities (*i.e.,* 2.01 km^2 for a Level A harassment distance of 1,435 m) minus the area of the shutdown zone for minke whales (*i.e.,* 1.34 km^2 for a shutdown zone distance of 1,000 m) to the area of the Level B harassment isopleth (4.34 km^2) for a Level B harassment distance of 5,162 m) (*i.e.,* (2.01 $km^2 - 1.34$ km^2)/4.34 km^2 = 0.15). We then multiplied this ratio by the total number of estimated minke whales exposures to determine take by Level A harassment (*i.e.,* 0.15 * 3 exposures = 0.45 takes, rounded up to 1 take by Level A harassment). Takes by Level B harassment were calculated as the number of estimated minke whale exposures minus the amount of take by Level A harassment (*i.e.,* 3 − 1). Therefore, NMFS authorizes one take by Level A harassment and two takes by Level B harassment for minke whales, for a total of three takes.

In summary, the total amount of takes by Level A harassment and Level B harassment authorized for each marine mammal stock is presented in Table 8.

TABLE 8—AMOUNT OF AUTHORIZED TAKE AS A PERCENTAGE OF STOCK ABUNDANCE, BY STOCK AND HARASSMENT TYPE

Species	Stock or DPS	Authorized take			Percent of stock
		Level A	Level B	Total	
Steller sea lion	Eastern	0	240	240	0.56
Harbor seals	Dixon/Cape Decision	78	130	208	0.89
Northern elephant seals	CA Breeding	1	3	4	<0.01
Harbor porpoises	Southern Southeast Alaska Inland Waters.	12	40	52	5.84
Dall's porpoises	Alaska	15	15	30	[1] UNK
Pacific white-sided dolphins	N Pacific	0	92	92	0.34
Killer whales	Eastern North Pacific Alaska Resident.	0	15	15	[2] 0.78
	Eastern Northern Pacific Northern Resident.				[2] 4.97
	West Coast Transient.				[3] 4.30
Humpback whales	Hawaii	9	23	32	[2] 0.28
	Mexico-North Pacific.				[1 2] UNK
Minke whales	Alaska	1	2	3	.....

[1] NMFS does not have an official abundance estimate for this stock; please refer to the Small Numbers section of this notice for a discussion regarding the percentage of this stock authorized for take.

[2] NMFS conservatively assumes that all takes occur to each stock.

Mitigation

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses (latter not applicable for this action). 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 DOT&PF must employ the following standard mitigation measures, as included in the IHA:

- Ensure that construction supervisors and crews, the monitoring team and relevant DOT&PF staff are trained prior to the start of all pile driving and DTH activity, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained prior to commencing work;
- Avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations shall cease. Should a marine mammal come within 10 m of a vessel in transit, the boat operator will reduce vessel speed to the minimum level required to maintain steerage and safe working conditions. If human safety is at risk, the in-water activity will be allowed to continue until it is safe to stop;
- Employ PSOs and establish monitoring locations as described in Section 5 of the IHA. The DOT&PF must monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions. For all pile driving and DTH activities at least two PSOs must be used;
- For all pile driving/removal activities, a minimum 30 m shutdown zone must be established. The purpose of a shutdown zone is generally to define an area within which shutdown of activity will occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). Shutdown zones will vary based on the type of driving/removal activity type and by marine mammal hearing group (see Table 9). Here, shutdown zones are larger than or equivalent to the calculated Level A harassment isopleths shown in Table 7, except when indicated due to practicability and effectiveness concerns. These concerns include the limited viewpoints available to station PSOs along Sukkwan Strait, the presence of landmasses that may obstruct viewpoints, and decreased effectiveness in sighting marine mammals at increased distances. Further, shutdown zones at greater distances than those in Table 9 will likely result in the DOT&PFs activities being shut down more frequently than is practicable for them to maintain their project schedule;

TABLE 9—SHUTDOWN ZONES DURING PROJECT ACTIVITIES

Activity	Pile size	Minutes (min) or strikes per pile	Piles per day	Shutdown zone (m)				
				LF	MF	HF	PW	OW
Vibratory Installation	20- and 24-inch	≤30 min	≤10	30	30	30	30	30
Vibratory Removal	16- and 24-inch	30 min	2	30	30	30	30	30
Impact Installation	20-inch	50 strikes	1	50	30	60	30	30
		50 strikes	2	80	30	90	[1] 40	30
	24-inch	50 strikes	1	70	30	80	40	30
		50 strikes	2	[1] 100	30	120	60	30
DTH (Rock Socket)	20- and 24-inch	60 min	1	360	30	430	200	30
		120 min	1	570	30	[2] 500	310	30
		180 min	1	750	30	[2] 500	400	30
		240 min	1	1,000	40	[2] 500	[2] 400	40
		300 min	1	[2] 1,000	40	[2] 500	[2] 400	50
		360 min	1	[2] 1,000	50	[2] 500	[2] 400	50
		420 min	1	[2] 1,000	50	[2] 500	[2] 400	60
		480 min	1	[2] 1,000	60	[2] 500	[2] 400	60
DTH (Tension Anchor)	8-inch	60 min	1	40	30	50	30	30
		120 min	1	60	30	70	40	30
		180 min	1	80	30	90	[1] 40	30
		240 min	1	100	30	110	30	30
		300 min	1	110	30	130	60	30
		360 min	1	120	30	150	70	30
		420 min	1	140	30	160	80	30
		480 min	1	150	30	180	80	30

[1] The shutdown zone is equivalent to the Level A harassment distance.
[2] The shutdown is smaller than the Level A harassment distance.

- DOT&PF anticipates that the maximum number of piles to be installed and or the daily duration of pile driving or DTH use may vary significantly, with large differences in maximum zone sizes possible

depending on the work planned for a given day (Table 7). Given this uncertainty, DOT&PF will utilize a tiered system to identify and monitor the appropriate Level A harassment zones and shutdown zones on a daily basis, based on the maximum expected number of piles to be installed (impact or vibratory pile driving) or the maximum expected DTH duration for each day. At the start of each work day, DOT&PF will determine the maximum scenario for that day (according to the defined duration intervals in Tables 7 and 9), which will determine the appropriate Level A harassment isopleth and associated shutdown zone for that day. This Level A harassment zone (Table 7) and associated shutdown zone (Table 9) must be observed by PSO(s) for the entire work day, regardless of whether DOT&&PF ultimately meets the anticipated scenario parameters for that day;

- Marine mammals observed anywhere within visual range of the PSO will be tracked relative to construction activities. If a marine mammal is observed entering or within the shutdown zones indicated in Table 9, pile driving or DTH activities must be delayed or halted. If pile driving or DTH activities are delayed or halted due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the shutdown zone (Table 9) or 15 minutes have passed without re-detection of the animal;
- Monitoring must take place from 30 minutes prior to initiation of pile driving (*i.e.,* pre-clearance monitoring) through 30 minutes post-completion of pile driving or DTH activity;
- Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine that the shutdown zones indicated in Table 9 are clear of marine mammals. Pile driving may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals;
- The DOT&PF must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced energy strike sets. A soft start must 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 starts will not be used for vibratory pile installation and removal or for DTH activities. PSOs shall begin observing for marine mammals 30 minutes before ''soft start'' or in-water pile installation or removal begins; and
- Pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone.

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

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 must be conducted by qualified, NMFS-approved PSOs, in accordance with the following:

- PSOs must be independent of the activity contractor (*e.g.,* employed by a subcontractor) and have no other assigned tasks during monitoring periods. At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued IHA or Letter of Concurrence. Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a. PSOs must be approved by NMFS prior to beginning any activity subject to these IHAs;
- DOT&PF must employ at least two PSOs during all pile driving and DTH activities. A minimum of one PSO must be assigned to the active pile driving or DTH location to monitor for marine mammals and implement shutdown/delay procedures when applicable by calling for the shutdown to the hammer operator. At least one additional PSO is also required, and should be placed at the best practical vantage point(s) to ensure that the shutdown zones are fully monitored and as much as the Level B harassment zones are monitored as practicable; though the observation points may vary depending on the construction activity and location of the piles;
- Where a team of three or more PSOs is required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization;
- PSOs will use a hand-held GPS device, rangefinder, or reticle binoculars to verify the required monitoring distance from the project site; and
- PSOs must record all observations of marine mammals, regardless of distance from the pile being driven. PSOs shall document any behavioral

reactions in concert with distance from piles being driven or removed.

PSOs must have the following additional qualifications:

- Ability to conduct field observations and collect data according to assigned protocols;
- Experience or training in the field identification of marine mammals, including the identification of behaviors;
- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;
- Writing skills sufficient to record required information including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior; and
- Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

Reporting

A draft marine mammal monitoring report will be submitted to NMFS within 90 days after the completion of pile driving and DTH activities, or 60 days prior to a requested date of issuance of any future IHAs for projects at the same location, whichever comes first. The reports will include an overall description of work completed, a narrative regarding marine mammal sightings, and associated PSO data sheets. Specifically, the reports 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, vibratory, or DTH) and the total equipment duration for vibratory installation, removal and DTH 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 (minimum, maximum, and best estimate); estimated number of animals by cohort (adults, juveniles, neonates, group composition, sex class, *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 and shutdown 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 reports will constitute the final reports. 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 event that personnel involved in the construction activities discover an injured or dead marine mammal, the IHA-holder must immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS (*PR.ITP.MonitoringReports@noaa.gov*), and to the Alaska Regional Stranding Coordinator as soon as feasible. If the death or injury was clearly caused by the specified activity, the DOT&PF must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the IHAs. The DOT&PF must not resume their activities until notified by NMFS. The report must include the following information:

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

Negligible Impact Analysis and Determination

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

To avoid repetition, the majority of our analysis applies to all the species listed in Table 2, given that many of the anticipated effects of the DOT&PFs construction activities 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 DTH 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 B harassment and, for some species Level A harassment, from underwater sounds generated by pile driving and DTH systems. Potential takes could occur if marine mammals are present in zones ensonified above the thresholds for Level B harassment or Level A harassment, identified above, while activities are underway.

The DOT&PF's construction activities and associated impacts will occur within a limited, confined area of the stocks' range. The work will occur in the vicinity of the seaplane dock immediately adjacent to Hydaburg and sound from the construction activities will be blocked by Sukkwan Island, Spook Island, Mushroom Island, and the coastline along Prince of Wales Island both southeast and northwest of the project site (see Figure 1–2 in the DOT&PF's application) to a maximum distance of 5,162 m and area of 4.34 km^2. The intensity and duration of take by Level A harassment and Level B harassment will be minimized through use of mitigation measures described herein. Further the amount of take authorized is small when compared to stock abundance. In addition, NMFS does not anticipate that serious injury or mortality will occur as a result of the DOT&PF's construction activities given the nature of the activity, even in the absence of required mitigation.

Exposures to elevated sound levels produced during pile driving and DTH may cause behavioral disturbance of some individuals. Behavioral responses of marine mammals to pile driving, pile removal, and DTH systems at the project site are expected to be mild, short term, and temporary. Effects on individuals that are taken by Level B harassment, as enumerated in the Estimated Take section, on the basis of reports in the literature as well as monitoring from other similar activities, will likely be limited to reactions such as increased swimming speeds, increased surfacing time, or decreased foraging (if such activity were occurring) (*e.g.,* Thorson and Reyff, 2006). Marine mammals within the Level B harassment zones may not show any visual cues they are disturbed by activities or they could become alert, avoid the area, leave the area, or display other mild responses that are not observable such as changes in vocalization patterns or increased haul out time (Thorson and Reyff, 2006). Additionally, some of the species present in the region will only be present temporarily based on seasonal patterns or during transit between other habitats. These temporarily present species will be exposed to even smaller periods of noise-generating activity, further decreasing the impacts. Most likely, individual animals will simply move away from the sound source and be temporarily displaced from the area, although even this reaction has been observed primarily only in association with impact pile driving. Because DOT&PF's activities could occur during any season, takes may occur during important feeding times. The project area though represents a small portion of available foraging habitat and impacts on marine mammal feeding for all species should be minimal.

The activities analyzed here are similar to numerous other construction activities conducted along southeastern Alaska (*e.g.,* 86 FR 43190, August 6, 2021; 87 FR 15387, March 18, 2022), which have taken place with no known long-term adverse consequences from behavioral harassment. These reactions and behavioral changes are expected to subside quickly when the exposures cease and, therefore, no such long-term adverse consequences should be expected (*e.g.,* Graham *et al.,* 2017). The intensity of Level B harassment events will be minimized through use of mitigation measures described herein, which were not quantitatively factored into the take estimates. The DOT&PF will use at least two PSOs stationed strategically to increase detectability of marine mammals during in-water pile driving and DTH activities, enabling a high rate of success in implementation of shutdowns to avoid or minimize injury for most species. Further, given the absence of any major rookeries and haulouts within the estimated harassment zones, we assume that potential takes by Level B harassment will have an inconsequential short-term effect on individuals and will not result in population-level impacts.

As stated in the mitigation section, DOT&PF will implement shutdown zones that equal or exceed many of the Level A harassment isopleths shown in Table 9. Take by Level A harassment is authorized for some species (harbor seals, northern elephant seals, harbor porpoises, Dall's porpoises, humpback whales, and minke whales) to account for the potential that an animal could enter and remain within the Level A harassment zone for a duration long enough to incur PTS. Any take by Level A harassment is expected to arise from, at most, a small degree of PTS because animals will need to be exposed to higher levels and/or longer duration than are expected to occur here in order to incur any more than a small degree of PTS.

Due to the levels and durations of likely exposure, animals that experience PTS will likely only receive slight PTS, *i.e.,* minor degradation of hearing capabilities within regions of hearing that align most completely with the frequency range of the energy produced by DOT&PF's in-water construction activities (*i.e.,* the low-frequency region below 2 kHz), not severe hearing impairment or impairment in the reigns of greatest hearing sensitivity. If hearing impairment does occur, it is most likely that the affected animal will lose a few dBs in its hearing sensitivity, which in most cases is not likely to meaningfully affect its ability to forage and communicate with conspecifics. There are no data to suggest that a single instance in which an animal accrues PTS (or TTS) and is subject to behavioral disturbance will result in impacts to reproduction or survival. If PTS were to occur, it will be at a lower level likely to accrue to a relatively small portion of the population by being a stationary activity in one particular location. Additionally, and as noted previously, some subset of the individuals that are behaviorally harassed could also simultaneously incur some small degree of TTS for a short duration of time. Because of the small degree anticipated, though, any PTS or TTS potentially incurred here is not expected to adversely impact individual fitness, let alone annual rates of recruitment or survival.

Theoretically, repeated, sequential exposure to pile driving noise over a long duration could result in more severe impacts to individuals that could affect a population. However, the limited number of non-consecutive pile driving days for this project and the absence of any pinniped haulouts or other known cetacean residency patterns in the action area means that these types of impacts are not anticipated.

For all species except humpback whales, there are no known BIAs near the project zone that will be impacted by DOT&PF's planned activities. For humpback whales, the whole of southeast Alaska is a seasonal feeding BIA from May through September (Wild *et al.,* 2023), however, Sukkwan Strait is a small passageway and represents a very small portion of the total available habitat. Also, while southeast Alaska is considered an important area for feeding

humpback during this time, it is not currently designated as critical habitat for humpback whales (86 FR 21082, April 21, 2021).

The project is also not expected to have significant adverse effects on any marine mammal habitat. The project activities will not modify existing marine mammal habitat since the project will occur within the same footprint as existing marine infrastructure. Impacts to the immediate substrate are anticipated, but these will be limited to minor, temporary suspension of sediments, which could impact water quality and visibility for a short amount of time but which will not be expected to have any effects on individual marine mammals.

In addition, impacts to marine mammal prey species are expected to be minor and temporary and to have, at most, short-term effects on foraging of individual marine mammals, and likely no effect on the populations of marine mammals as a whole. Overall, the area impacted by the project is very small compared to the available surrounding habitat, and does not include habitat of particular importance. The most likely impact to prey will be temporary behavioral avoidance of the immediate area. During construction activities, it is expected that some fish and marine mammals will temporarily leave the area of disturbance, thus impacting marine mammals' foraging opportunities in a limited portion of the foraging range. But, because of the relatively small area of the habitat that may be affected, and lack of any habitat of particular importance, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

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

- No serious injury or mortality is anticipated or authorized;
- Level A harassment authorized is expected to be of a lower degree that will not impact the fitness of any animals;
- Anticipated incidents of Level B harassment consist of, at worst, temporary modifications in behavior;
- The required mitigation measures (*i.e.,* soft starts, shutdown zones) are expected to be effective in reducing the effects of the specified activity by minimizing the numbers of marine mammals exposed to injurious levels of sound, and by ensuring that any take by Level A harassment is, at most, a small degree of PTS;
- The intensity of anticipated takes by Level B harassment is low for all stocks and will not be of a duration or intensity expected to result in impacts on reproduction or survival;
- Minimal impacts to marine mammal habitat/prey are expected;
- The only known area of specific biological importance covers a broad area of southeast Alaska for humpback whales, and the project area is a very small portion of that BIA. No other known areas of particular biological importance to any of the affected species or stocks are impacted by the activity, including ESA-designated critical habitat;
- The project area represents a very small portion of the available foraging area for all potentially impacted marine mammal species and stocks and anticipated habitat impacts are minor; and
- Monitoring reports from similar work in southeast Alaska have documented little to no effect on individuals of the same species impacted by the specified activities.

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

Small Numbers

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

The maximum annual amount of take NMFS proposes to authorize for five marine mammal stocks is below one-third of the estimated stock abundance for all species (in fact, take of individuals is less than six percent of the abundance of all affected stocks, see Table 8). The number of animals authorized to be taken from these stocks will be considered small relative to the relevant stock's abundances even if each estimated take occurred to a new individual. Some individuals may return multiple times in a day, but PSOs will count them as separate individuals if they cannot be individually identified.

The Alaska stock of Dall's porpoise has no official NMFS abundance estimate for this area, as the most recent estimate is greater than eight years old. Abundance estimates for Dall's porpoise in inland waters of southeast Alaska were calculated from 19 line-transect vessel surveys from 1991 to 2012 (Jefferson *et al.,* 2019). Abundance across the whole period was estimated at 5,381 (CV = 0.25), 2,680 (CV = 0.20), and 1,637 (CV = 0.23) in the spring, summer, and fall, respectively (Jefferson *et al.,* 2019). The minimum population estimate (N_{MIN}) for the entire Alaska stock is assumed to correspond to the point estimate of a 2015 vessel-based abundance computed by Rone *et al.* (2017) in the Gulf of Alaska (N = 13,110; CV = 0.22) (Muto *et al.,* 2022); however, the study area of this survey corresponds to a small fraction of the range of the stock and, thus it is reasonable to assume that the stock size is equal to or greater than that estimate (Muto *et al.,* 2022). Therefore, the 22 takes of this stock authorized clearly represent small numbers of this stock.

The abundance estimate for the Mexico-North Pacific stock of humpback whales is also considered to be unknown as estimates are based on data collected more than 15 years ago (Young *et al.,* 2023). A multi-strata mark-recapture analysis of data from 2004 through 2006 resulted in an abundance estimate of 5,890 (CV = 0.075) humpbacks for Southeast Alaska and northern British Columbia (Wade 2021); however, this estimate represents a mixture of whales from up to three winter areas (the western North Pacific (Asia), Hawaii, and Mexico), and thus does not represent the abundance of just the Mexico-North Pacific stock in its summer areas. The number of animals in the feeding areas belonging to the Mexico-North Pacific stock was determined by multiplying the abundance estimate for each feeding area (*i.e.,* Bering Sea and Aleutian Islands, Gulf of Alaska, and Southeast Alaska and northern British Columbia) by the probability of movement between that feeding area and the Mexican wintering area, as estimated by Wade

(2021), and then adding those estimates together. This resulted in an estimate of 918 animals (CV = 0.217) and an N_{MIN} estimate of 766 animals for this stock (Young *et al.,* 2023). While the abundance trend for this stock is unclear; the 32 takes authorized represent small numbers of this stock based on this available data.

There is also no current or historical estimate of the Alaska minke whale stock, but minke whale abundance has been estimated to be over 1,000 whales in portions of Alaska (Muto *et al.,* 2022) so the 3 takes authorized represent small numbers of this stock. Additionally, the range of the Alaska stock of minke whales is extensive, stretching from the Canadian Pacific coast to the Chukchi Sea, and DOT&PF's project area impacts a small portion of this range. Therefore, the three takes of minke whale authorized is small relative to estimated survey abundance, even if each authorized take occurred to a new individual.

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

Unmitigable Adverse Impact Analysis and Determination

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

Alaska Natives have traditionally harvested subsistence resources in southeast Alaska for many hundreds of years, particularly large terrestrial mammals, marine mammals, salmon, and other fish (Alaska Department of Fish and Game (ADF&G), 1997). Harbor seals and sea otters are reported to be the marine mammal species most regularly harvested for subsistence in the waters surrounding Hydaburg (NOAA, 2013). An estimated 14.4 harbor seals were harvested by Hydaburg residents every year from 2000 through 2008 (ADF&G, 2009a, 2009b). Hunting usually occurs in the late fall and winter (ADF&G, 2009a). The ADF&G has not recorded harvest of cetaceans from Hydaburg (ADF&G, 2022). There are no subsistence activities near the project that target humpback whales, and subsistence hunters rarely target Steller sea lions near the project area.

Approximately 93 percent of Hydaburg residents identified as Alaska Native (Sill and Koster, 2017) in 2012. Nearly half of all households harvested wild resources in 2012, with nearly all Hydaburg households using salmon, non-salmon fish, marine invertebrates, and vegetation (Sill and Koster, 2017). Only six percent of Hydaburg households participated in the hunting, use, or receiving of harbor seals in 2012, whereas up to eight percent used sea otters (Sill and Koster, 2017). Based on data from 2012, marine mammals account for approximately one percent (1,666 pounds or 756 kg) of all subsistence harvest in Hydaburg (Sill and Koster, 2017).

All pile driving and DTH activities will take place in the vicinity of seaplane dock immediately adjacent to Hydaburg where subsistence activities do not generally occur. The project will not have an adverse impact on the availability of marine mammals for subsistence use at locations farther away. Some minor, short-term disturbance of the harbor seals or sea otters could occur, but this is not likely to have any measurable effect on subsistence harvest activities in the region. No changes to availability of subsistence resources will result from the specified activities. Additionally, DOT&PF is working with Haida Elders on the project to raise awareness and collaborate on the project within the local community.

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

Endangered Species Act

Section 7(a)(2) of the 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 NMFS' Alaska Regional Office (AKRO).

There is one marine mammal species (Mexico DPS humpback whales) with confirmed occurrence in the project area that is listed as threatened under the ESA. AKRO issued a Biological Opinion on December 19, 2023 under section 7 of the ESA, on the issuance of an IHA to the DOT&PF under section 101(a)(5)(D) of the MMPA by the NMFS Office of Protected Resources. The Biological Opinion concluded that the proposed action is not likely to jeopardize the continued existence of Mexico DPS humpback whales.

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 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 will preclude this categorical exclusion. Accordingly, NMFS has determined that the issuance of the IHA qualifies to be categorically excluded from further NEPA review.

Authorization

NMFS has issued an IHA to the DOT&PF for the potential harassment of small numbers of nine marine mammal species incidental to the Hydaburg Seaplane Base Refurbishment Project in Hydaburg, Alaska, that includes the previously explained mitigation, monitoring and reporting requirements.

Dated: January 3, 2024.

Kimberly Damon-Randall,

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

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