document is being modified with new information in the ABSTRACT and DATA sections, and Commerce hereby issues a correction notice as required by the Paperwork Reduction Act of 1995.

FOR FURTHER INFORMATION CONTACT: For additional information concerning this correction, contact Adrienne Thomas, NOAA PRA Officer, at *NOAA.PRA@noaa.gov.*

SUPPLEMENTARY INFORMATION:

Correction

Abstract

This request is for a revision and extension of a currently approved information collection and is sponsored by NOAA's Southeast Fisheries Science Center (SEFSC).

The objective of the data collection effort under OMB Control Number 0648–0769 is to understand how Florida anglers respond to changes in trip costs and/or fishing regulations in the Gulf of Mexico and Atlantic Ocean. The population to be surveyed consists of those anglers who fish in the Gulf of Mexico or Atlantic Ocean from Florida for reef fish species. The sample will be drawn from the list of Florida anglers with the State Reef Fish Angler license designation and matched to the state of Florida's boat registration list. The sample is targeted to anglers who fish for reef species who fish from a boat given that most reef species occur offshore.

Data

Type of Review: Regular submission, revision and extension of a current information collection.

Estimated Number of Respondents: 2,000.

Estimated Total Annual Burden Hours: 100.

We are soliciting public comments to permit the Department/Bureau to: (a) Evaluate whether the proposed information collection is necessary for the proper functions of the Department, including whether the information will have practical utility; (b) Evaluate the accuracy of our estimate of the time and cost burden for this proposed collection, including the validity of the methodology and assumptions used; (c) Evaluate ways to enhance the quality, utility, and clarity of the information to be collected; and (d) Minimize the reporting burden on those who are to respond, including the use of automated collection techniques or other forms of information technology.

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

Sheleen Dumas,

Department PRA Clearance Officer, Office of the Chief Information Officer, Commerce Department.

[FR Doc. 2022–10918 Filed 5–19–22; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XB747]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the U.S. Coast Guard's Floating Dock Extension Project at Base Ketchikan, Alaska

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

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

SUMMARY: NMFS has received a request from the United States Coast Guard (USCG) for authorization to take marine mammals incidental to the floating dock extension construction project in Ketchikan, Alaska. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an incidental harassment authorization (IHA) to incidentally take marine mammals during the specified activities. NMFS is also requesting comments on a possible one-time, one-year renewal that could be issued under certain circumstances and if all requirements are met, as described in Request for Public Comments at the end of this notice. NMFS will consider public comments prior to making any final decision on the issuance of the requested MMPA authorizations and agency responses will be summarized in the final notice of our decision.

DATES: Comments and information must be received no later than June 21, 2022.

ADDRESSES: Comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service. Written comments should be submitted via email to *ITP.Corcoran@noaa.gov.*

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

FOR FURTHER INFORMATION CONTACT: Kim Corcoran, Office of Protected Resources, NMFS, (301) 427–8401. 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/permit/incidental-take-authorizations-under-marine-mammal-protection-act.* In case of problems accessing these documents, please call the contact listed above.

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 issued or, if the taking is limited to harassment, a notice of a proposed incidental take authorization may be provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other ''means of effecting the least

practicable adverse impact'' on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to in shorthand as ''mitigation''); and requirements pertaining to the mitigation, monitoring and reporting of the takings are set forth.

The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

National Environmental Policy Act

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

This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NOAA Administrative Order 216–6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has preliminarily determined that the issuance of the proposed IHA qualifies to be categorically excluded from further NEPA review. We will review all comments submitted in response to this notice prior to concluding our NEPA process or making a final decision on the IHA request.

Summary of Request

On March 9th, 2021, NMFS received a request from the USCG for an IHA to take marine mammals incidental to the construction of the floating dock extension at Base Ketchikan, Alaska. Following NMFS' review of the request, USCG provided additional information on July 22, 2021, and again on March 7, 2022. The application was deemed adequate and complete on the latter date. USCG's request is for take of ten species of marine mammals by Level B harassment and, for a subset of three species, by Level A harassment. Neither USCG nor NMFS expects serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

Description of Proposed Activity

Overview

The USCG requests an Incidental Harassment Authorization (IHA) for activities associated with the construction of the Floating Dock Extension Project in the Tongass Narrows at Coast Guard Base Ketchikan (Base Ketchikan) in Ketchikan, Alaska. The proposed project will cover a 12-month window during which approximately 30 days of pile-installation activity will occur. The project involves the installation of ten, 24-inch steel guide piles for a third floating dock section. Three different installation methods will be used including the Down-the-Hole (DTH) system to create rock sockets for new piles, vibratory installation of piles, and final pile proofing with a limited use of impact pile driving. Sounds resulting from pile installation and drilling may result in the incidental take of marine mammals by Level A and Level B harassment in the form of auditory injury or behavioral harassment.

Dates and Duration

The proposed IHA would be effective from July 1, 2022 through June 30, 2023. The total expected work duration would be 15 construction days (5 days of DTH, 5 days of vibratory pile installation, and 5 days of impact pile driving) with an additional 15 day buffer to account for days where work is paused (*e.g.,* inclement weather), for a total work window of 30 days. The USCG plans to conduct all work during daylight hours.

Specific Geographic Region

The proposed activity will occur in the Tongass Narrows at Base Ketchikan in Ketchikan, Alaska (Figure 1). Base Ketchikan is located on the southwestern end of Revillagigedo Island, approximately 235 miles south of Juneau and 90 miles north of Prince Rupert, British Columbia. The Base is about 1 mile south of downtown Ketchikan, on the industrial limits of the city, and on the East Channel of the Tongass Narrows. The waters of the Tongass Narrows are heavily used by the public including cruise ships, commercial fishing vessels, and private craft and sea planes, which contribute significantly to the ambient acoustic environment in the Narrows.

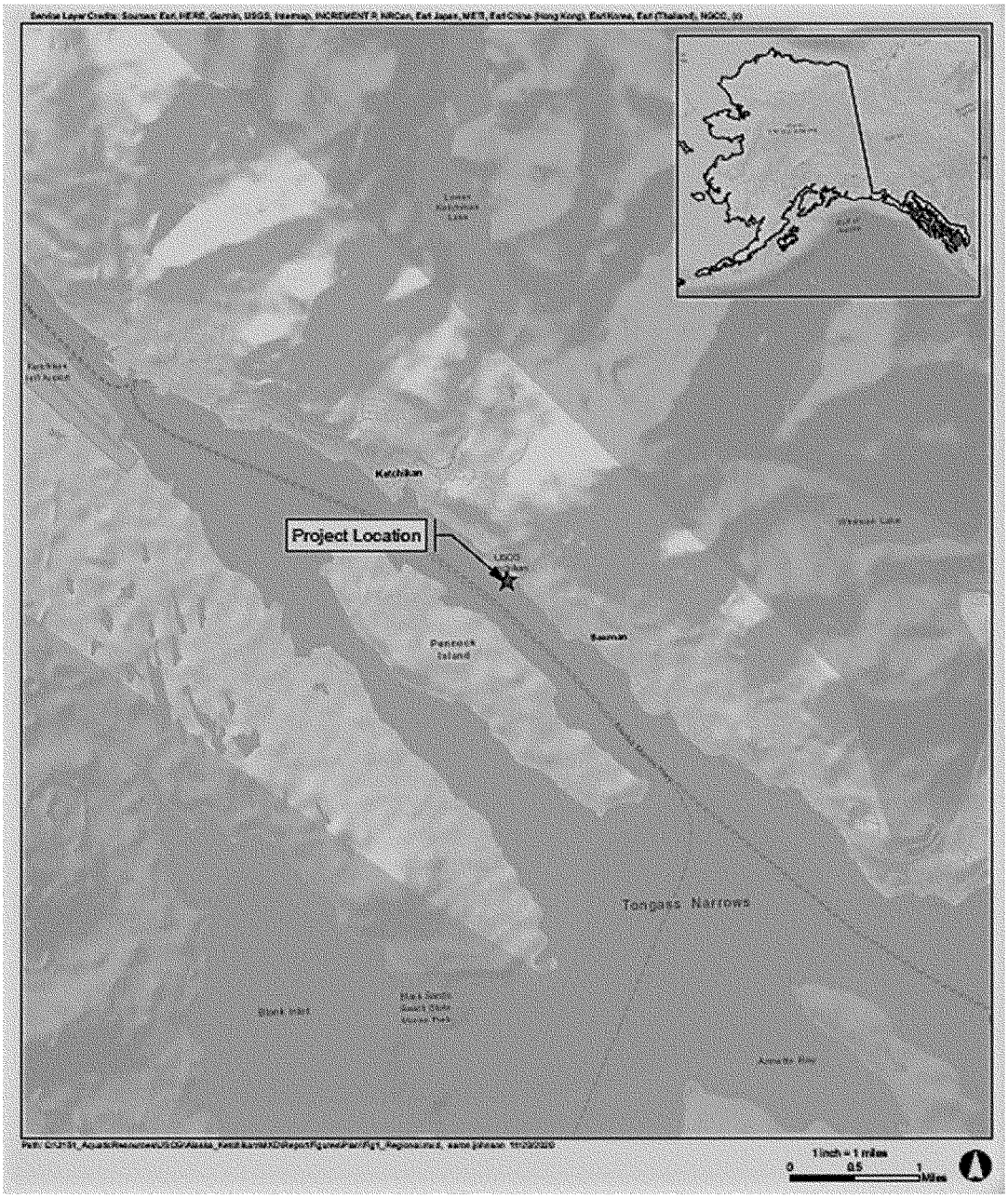

Figure 1. Map illustrating the proposed project location at USCG Base Ketchikan.

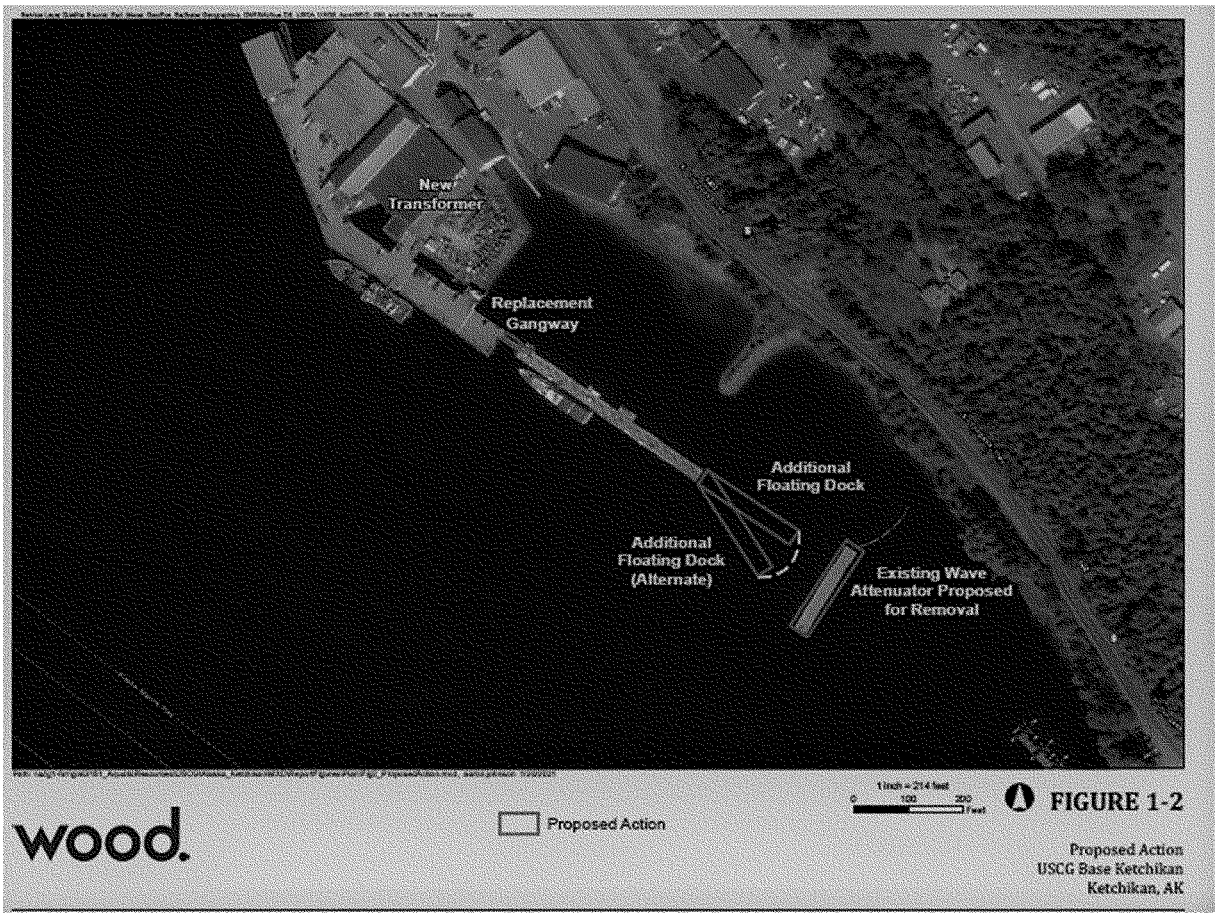

Figure 2. Map of USCG Base Ketchikan and proposed floating dock extension components and actions.

Detailed Description of Specific Activity

USCG plans to install ten steel guide piles for a third floating dock section at Base Ketchikan to support the homeporting of a third Fast Response Cutter (FRC) (Figure 2). The piles would be installed over a period of 30 days, allotting five construction days to each of the three methods of installation, in addition to 15 additional buffer days to account for unforeseen interruptions (*e.g.,* inclement weather). These methods include DTH, vibratory pile installation and impact driving pile proofing (see Table 1).

The use of DTH will depend on the overburden thickness and bedrock bottom conditions beneath the proposed floating dock extension (see Figure 2). If needed, the DTH system will be used to pre-drill sockets for each guide pile that will be installed. Neighboring projects in the Tongass Narrows have reported ten feet of overburden requiring 20-foot deep sockets to be drilled for pile installation. USCG expects conditions to be similar at the proposed project site. Once rock sockets are drilled, 24-inch steel piles would be inserted using a vibratory hammer. An impact pile driver would then be used to proof the newly installed piles which would then be stabilized using concrete in the pile socket. Floating stick bar booms will be deployed around the active work area to provide a complete barrier to floating debris.

Additional actions occurring under the proposed action that are not anticipated to generate in-water noise resulting in marine mammal harassment include the removal of the existing wave attenuator southeast of the proposed floating dock extension (Figure 2). Removal of the existing wave attenuator will include removal of stockless anchors vertically off the seafloor and floating the concrete wave attenuator to a recycling/disposal location. Once the piles are installed, the floating dock would be placed around the 10 guide piles followed by ancillary infrastructure (*e.g.,* electricity, water, sewage, communications) to support the docked cutters. NMFS does not expect, that these ancillary activities will harm or harass marine mammals and no incidental takes are expected as a result of these activities. Therefore, these activities are not discussed further in this document.

TABLE 1—PILE INSTALLATION METHODS AND DURATIONS

Installation method	Duration/impacts per pile	Piles driven/day	Estimated days
DTH	60 minutes	2	5.
Vibratory pile installation	6 minutes	2	5.
Impact driving pile proofing	5 impacts	2	5 (10 strikes).
Total			15 (30) [1]

[1] The total expected work duration is 15 days with an additional 15 day buffer to account for days where work is paused (*e.g.,* inclement weather) for a total work window of 30 days.

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

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history, of the potentially affected species. NMFS fully considered all of this information, and we refer the reader to these descriptions, incorporated here by reference, instead of reprinting the information. Additional information regarding population trends and threats may be found in NMFS's Stock Assessment Reports (SARs; *https://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's website (*https://www.fisheries.noaa.gov/find-species*).

Table 2 lists all species or stocks for which take is expected and proposed to be authorized for this action, 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. For taxonomy, we follow Committee on Taxonomy (2021). 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's SARs). While no mortality is anticipated or authorized here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species 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's stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS's U.S. 2021 Draft SARs (*e.g.,* Muto et al., 2021). All values presented in Table 2 are the most recent available at the time of publication and are available in the 2021 draft SARs (Muto et al., 2021). 2020 SARs (Muto et al., 2021) and draft 2021 SARs (available online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/draft-marine-mammal-stock-assessment-reports*).

TABLE 2—SPECIES 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 Cetartiodactyla—Cetacea—Superfamily Mysticeti (baleen whales)						
Family Eschrichtiidae:						
Gray whale	*Eschrichtius robustus*	Eastern North Pacific Stock.	-,-,N	26,960 (0.05, 25,849, 2016)	801	131
Family Balaenopteridae (rorquals):						
Humpback whale	*Megaptera novaeanglinae*	Central North Pacific Stock.	-,-,Y	10,103 (0.3, 7,890, 2006)	83	26
Minke whale	*Balaenoptera acutorostrata*	Alaska Stock	-,-,N	N/A (N/A, N/A, N/A) [4]	UND	0
Superfamily Odontoceti (toothed whales, dolphins, and porpoises)						
Family Delphinidae:						
Killer whale	*Orca orcinus*	Alaska Resident	-,-,N	2,347 (N/A, 2347, 2012)	24	1
		Northern Resident	-,-,N	302 (N/A, 302, 2018)	2.2	0.2
		West Coast Transient	-,-,N	349 (N/A, 349, 2018)	3.5	0.4
Pacific white-sided dolphin	*Lagenorhynchus obliquidens*	North Pacific Stock	-,-,N	26,880 (N/A, N/A,1990)	UND	0
Family Phocoenidae (porpoises):						
Dall's porpoise [6]	*Phocoenoides dalli*	Alaska Stock	-,-,N	15,432 (0.097,13,110,2015)	131	37
Harbor porpoise [7]	*Phocoena phocoena*	Southeast Alaska Stock	-,-,Y	1302 (0.21, 1057, 2019)	11	34
Order Carnivora—Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions):						
Steller sea lion	*Eumetopias jubatus*	Eastern Stock	-,-,N	43,201 (N/A, 43,201, 2017)	2,592	112

TABLE 2—SPECIES 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]
Family Phocidae (earless seals):						
Harbor seal	*Phoca vituline richardii*	Clarence Strait Stock	-,-,N	27,659 (N/A, 24,854, 2015)	746	40
Northern Elephant seal	*Mirounga angustirostris*	California Breeding Stock	-,-,N	187,386 (N/A, 85,369, 2013)	5,122	5.3

[1] Endangered Species Act (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* CV is coefficient of variation; Nmin is the minimum estimate of stock abundance.

[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 M/SI often cannot be determined precisely and is in some cases presented as a minimum value or range. A CV associated with estimated mortality due to commercial fisheries is presented in some cases.

[4] No population estimates have been made for the number of minke whales in the entire North Pacific. Some information is available on the numbers of minke whales on some areas of Alaska, but in the 2009, 2013 and 2015 offshore surveys, so few minke whales were seen during the surveys that a population estimate for the species in this area could not be determined (Rone *et al.,* 2017). Therefore, this information is N/A (not available).

[6] Previous abundance estimates covering the entire stock's range are no longer considered reliable and the current estimates presented in the SARs and reported here only cover a portion of the stock's range. Therefore, the calculated Nmin and PBR is based on the 2015 survey of only a small portion of the stock's range. PBR is considered to be biased low since it is based on the whole stock whereas the estimate of mortality and serious injury is for the entire stock's range.

[7] Abundance estimates assumed that detection probability on the trackline was perfect; work is underway on a corrected estimate. Additionally, preliminary data results based on eDNA analysis show genetic differentiation between harbor porpoise in the northern and southern regions on the inland waters of southeast Alaska. Geographic delineation is not yet known. Data to evaluate population structure for harbor porpoise in Southeast Alaska have been collected and are currently being analyzed. Should the analysis identify different population structure than is currently reflected in the Alaska SARs, NMFS will consider how to best revise stock designations in the future.

As indicated above, all ten species (with twelve managed stocks) in Table 2 temporally and spatially co-occur with the activity to the degree that take is reasonably likely to occur, and we have proposed authorizing it. Fin whale could potentially occur in the area, however there are no known sightings nearby and USCG would shut down activity if the whale enters the harassment zones. Therefore, given the former and the rarity of the species, take is not expected to occur and they are not discussed further.

In addition, the northern sea otter (*Enhydra lutris kenyoni)* may be found in the Tongass Narrows. However, northern sea otters are managed by the U.S. Fish and Wildlife Service and are not considered further in this document.

Steller Sea Lion

Steller sea lions were listed as threatened range-wide under the ESA on November 26, 1990 (55 FR 49204). Steller sea lions were subsequently partitioned into the western and eastern Distinct Population Segments (DPSs; western and eastern stocks) in 1997 (62 FR 24345; May 5, 1997). The eastern DPS remained classified as threatened until it was delisted in November 2013. The current minimum abundance estimate for the eastern DPS of Steller sea lions is 43,201 individuals (Muto *et al.,* 2021). The western DPS (those individuals west of the 144°W longitude or Cape Suckling, Alaska) was upgraded to endangered status following separation of the DPSs, and it remains endangered today. There is regular movement of both DPSs across this 144°W longitude boundary (Jemison *et al.,* 2013), however, due to the distance from this DPS boundary, it is likely that only eastern DPS Steller sea lions are present in the project area. Therefore, animals potentially affected by the project are assumed to be part of the eastern DPS. Sea lions from the western DPS, are not likely to be affected by the proposed activity and are not discussed further.

There are several mapped and regularly monitored long-term Steller sea lion haulouts surrounding Ketchikan, such as West Rocks (36 mi/58 km) or Nose point (37 mi/60 km), but none are known to occur within Tongass Narrows (Fritz *et al.,* 2015). The nearest known Steller sea lion haulout is located approximately 21 mi (34 km) west/northwest of Ketchikan on Grindall Island. None of these haulouts would be affected by the proposed activity. Summer counts of adult and juvenile sea lions at on Grindall Island from 2000 through 2015 have averaged approximately 191 individuals, with a range from 6 in 2009 to 378 in 2008. Only two winter surveys of this haulout have occurred. No sea lion pups have been observed at this haulout during surveys. Although this is a limited sample, it suggests that abundance may be consistent year-round at the Grindall Island haulout.

No systematic studies of sea lion abundance or distribution have occurred in Tongass Narrows. Anecdotal reports suggest that Steller sea lions may be found in Tongass Narrows year-round, with an increase in abundance from March to early May during the herring spawning season, and another increase in late summer associated with salmon runs. Overall sea lion presence in Tongass Narrows tends to be lower in summer than in winter (FHWA, 2017). During summer, Steller sea lions may aggregate outside the project area, at rookery and haulout sites. Monitoring during construction of the Ketchikan Ferry Terminal in summer (July 16 through August 17, 2016) did not record any Steller sea lions (ADOT&PF, 2015); however, monitoring during construction of the Ward Cove Dock, approximately 11 km northwest of the proposed project site, recorded 181 individual sea lions between February and September 2020 (Power Systems & Supplies of Alaska, 2020). Most sightings occurred in February (45 sightings of 88 sea lions) and March (34 sightings of 45 sea lions); the fewest number of sightings were observed in May (1 sighting of 1 sea lion) (Power Systems & Supplies of Alaska, 2020).

Sea lions are known to transit through Tongass Narrows while pursing prey. Steller sea lions are known to follow fishing vessels, and may congregate in small numbers at seafood processing facilities and hatcheries or at the mouths of rivers and creeks containing hatcheries, where large numbers of salmon congregate in late summer. Three seafood processing facilities are located east of the proposed berth location on Revillagigedo Island, and two salmon hatcheries operated by the Alaska Department of Fish & Game (ADF&G) are located east of the project area. Steller sea lions may aggregate near the mouth of Ketchikan Creek, where a hatchery upstream supports a summer salmon run. The Creek mouth

is more than 4 km (2.5 mi) form both ferry berth sites, and is positioned behind the cruise ship terminal and within the small boat harbor of Ketchikan. In addition to these locations, anecdotal information from a local kayaking company suggests that there are Steller sea lions present at Gravina Point, near the southwest entrance to Tongass Narrows, about 3 mi (~5 km) southwest of the project site.

A total of 181 Steller sea lions were sighted on 44 separate days during all months of the Ward Cove Cruise Ship Dock construction project (February–September, 2020) (Power Systems and Supplies of Alaska, 2020). Most sightings occurred in February and March and the fewest sightings were in May. Sightings were of single individuals, pairs, and herds of up to 10 individuals. They were identified as traveling, foraging, swimming, chuffing, milling, looking, sinking, spyhopping, and playing.

Harbor Seal

Harbor seals inhabit coastal and estuarine waters off Alaska. They haul out on rocks, reefs, beaches, and drifting glacial ice. They are opportunistic feeders and often adjust their distribution to take advantage of locally and seasonally abundant prey (Womble *et al.,* 2009, Allen and Angliss, 2015).

Harbor seals occurring in the project area belong to the Clarence Strait stock. Distribution of the Clarence Strait stock ranges from the east coast of Prince of Wales Island from Cape Chacon north through Clarence Strait to Point Baker and along the east coast of Mitkof and Kupreanof Islands north to Bay Point, including Ernest Sound, Behm Canal, and Pearse Canal (Muto *et al.,* 2021). In the project area, they tend to be more abundant during spring, summer and fall months when salmon are present in Ward Creek. Anecdotal evidence indicates that harbor seals typically occur in groups of 1–3 animals in Ward Cove with a few sightings per day (Spokely, 2019). They were not observed in Tongass Narrows during a combined 63.5 hours of marine mammal monitoring that took place in 2001 and 2016 (OSSA, 2001, Turnagain, 2016). There are no known harbor seal haulouts within the project area. According to the list of harbor seal haulout locations, the closest listed haulouts are located off the tip of Gravina Island, approximately 8 km (5 mi) northwest of Ward Cove (AFSC, 2018), however none overlap with the proposed project area.

Killer Whale

Killer whales have been observed in all the world's oceans, but the highest densities occur in colder and more productive waters found at high latitudes (NMFS, 2016). Killer whales occur along the entire Alaska coast, in British Columbia and Washington inland waterways, and along the outer coasts of Washington, Oregon, and California (NMFS, 2016).

Based on data regarding association patterns, acoustics, movements, and genetic differences, eight killer whale stocks are now recognized within the Pacific U.S. Exclusive Economic Zone (U.S. EEZ). This proposed IHA considers only the Eastern North Pacific Alaska Resident stock (Alaska Resident stock), the Eastern North Pacific Northern Resident stock (Northern Resident Stock), and the West Coast Transient stock, as all other stocks do not overlap with the proposed project area (Muto *et al.,* 2021).

There are three distinct ecotypes, or forms, of killer whales recognized: Resident, Transient, and Offshore. The three ecotypes differ morphologically, ecologically, behaviorally, and genetically. Surveys between 1991 and 2007 encountered resident killer whales during all seasons throughout Southeast Alaska. Both residents and transients were common in a variety of habitats and all major waterways, including protected bays and inlets. There does not appear to be strong seasonal variation in abundance or distributed of killer whales, but there was substantial variability between years (Dahlheim *et al.,* 2009). Spatial distribution has been shown to vary among the different ecotypes, with resident and, to a lesser extent, transient killer whales more commonly observed along the continental shelf, and offshore killer whales more commonly observed in pelagic waters (Rice *et al.,* 2021).

No systematic studies of killer whales have been conducted in or around Tongass Narrows. Killer whales have been observed in Tongass Narrows year-round and are most common during the summer Chinook salmon run (May–July). During the Chinook salmon run, Ketchikan residents have reported pods of up to 20–30 whales (84 FR 36891; July 30, 2019). Typical pod sizes observed within the project vicinity range from 1 to 10 animals and the frequency of killer whales passing through the action area is estimated to be once per month (Frietag, 2017). Anecdotal reports suggest that large pods of killer whales (as many as 80 individuals, but generally between 25 and 40 individuals) are not uncommon in May, June, and July when the king salmon are running. During the rest of the year, killer whales occur irregularly in pods of 6 to 12 or more individuals.

Transient killer whales are often found in long-term stable social units (pods) of 1 to 16 whales. Average pod sizes in Southeast Alaska were 6.0 in spring, 5.0 in summer and 3.9 in fall. Pod sizes of transient whales are generally smaller than those of resident social groups. Resident killer whales occur in larger pods, ranging from 7 to 70 whales that are seen in association with one another more than 50 percent of the time (Dahlheim *et al.,* 2009).

Although killer whales may occur in large numbers, they generally form large pods and would incur fewer work stoppages than their numbers suggest since stoppages correlate more with the number of pods than the number of individuals. Killer whales tend to transit through Tongass Narrows, and do not linger in the project area.

Marine mammal observations in Tongass Narrows during 2020 and 2021 support an estimate of approximately one group of killer whales a month in the project area. During 7 months of monitoring (October 2020–February 2021; May–June 2021), there were five killer whale sightings in 4 months (November, February, May, and June) totaling 22 animals and sightings occurred on 5 out of 88 days of monitoring (DOT&PF, 2020, 2021a, 2021b, 2021c, 2021d). Pod sizes ranged from two to eight animals. During the COK's monitoring for the Rock Pinnacle Removal project in December 2019 and January 2020, no killer whales were observed. Over eight months of monitoring at the Ward Cove Cruise Ship Dock in occurred in 2020, and killer whales were only observed on two days in March (Power Systems and Supplies of Alaska, 2020). These observations included a sighting of one pod of two killer whales and a second pod of five individuals travelling through the project area.

Pacific White-Sided Dolphin

Pacific white-sided dolphins are a pelagic species inhabiting temperate waters of the North Pacific Ocean and along the coasts of California, Oregon, Washington, and Alaska (Muto *et al.,* 2021). Despite their distribution mostly in deep, offshore waters, they may also be found over the continental shelf and near shore waters, including inland waters of Southeast Alaska (Ferrero and Walker, 1996). They are managed as two distinct stocks: The California/Oregon/Washington stock, and the North Pacific stock (north of 45 N, including Alaska). The North Pacific stock ranges from

Canada into Alaska, and is thus the only stock that is found within the project area (Muto *et al.,* 2021).

Pacific white-sided dolphins prey on squid and small schooling fish such as capelin, sardines, and herring (Morton, 2006). They are known to work in groups to herd schools of fish and can dive underwater for up to 6 minutes to feed (Morton, 2006). Group sizes have been reported to range from 40 to over 1,000 animals, but groups of between 10 and 100 individuals occur most commonly (Stacey and Baird, 1991; NMFS no date). Seasonal movements of Pacific white-sided dolphins are not well understood, but there is evidence of both north-south seasonal movement (Leatherwood *et al.,* 1984) and inshore-offshore seasonal movement (Stacey and Baird, 1991).

Scientific studies and data are lacking relative to the presence or abundance of Pacific white-sided dolphins in or near Tongass Narrows. Although they generally prefer deeper and more-offshore waters, anecdotal reports suggest that Pacific white-sided dolphins have previously been observed in Tongass Narrows, although they have not been observed entering Tongass Narrows or nearby inter-island waterways in 15–20 years.

Pacific white-sided dolphins are rare in the inside passageways of Southeast Alaska. Most observations occur off the outer coast or in inland waterways near entrances to the open ocean. According to Muto *et al.,* (2018), aerial surveys in 1997 sighted one group of 164 Pacific white-sided dolphins in Dixon entrance to the south of Tongass Narrows. Surveys in April and May from 1991 to 1993 identified Pacific white-sided dolphins in Revillagigedo Channel, Behm Canal, and Clarence Strait (Dahlheim and Towell 1994). There areas are contiguous within the open ocean waters of the Dixon Entrance. This observational data, combined with anecdotal information, indicates there is a rare, however, slight potential for Pacific white-sided dolphins to occur in the project area.

During marine mammal monitoring of the Tongass Narrows in 2020 and 2021, no Pacific white-sided dolphins were observed on 88 days of observations across 7 months (October 2020–February 2021; May–June 2021), which supports anecdotal evidence that sightings of this species are rare (DOT&PF, 2020, 2021a, 2021b, 2021c, 2021d). There were also no sightings of Pacific white-sided dolphins during the COK Rock Pinnacle Blasting Project during monitoring surveys conducted in December 2019 and January 2020 (Sitkiewicz, 2020) or during monitoring surveys conducted between February-September 2020 as part of the Ward Cove Cruise Ship Dock project (Power Systems and Supplies of Alaska, 2020).

Dall's Porpoise

Dall's porpoises are found throughout the North Pacific, from southern Japan to southern California north to the Bering Sea. All Dall's porpoises in Alaska are members of the Alaska stock. This species can be found in offshore, inshore, and nearshore habitats.

Jefferson *et al.,* (2019) presents historical survey data showing few sightings in the Ketchikan area. The mean group size in Southeast Alaska is estimated at approximately three individuals (Dahlheim *et al.,* 2009, Jefferson *et al.,* 2019), although Freitag (2017, as cited in 83 FR 37473) suggested group sizes near Ketchikan range from 10 to 15 individuals. Anecdotal reports suggest that Dall's porpoises are found northwest of Ketchikan near the Guard Islands, where waters are deeper, as well as in deeper waters southeast of Tongass Narrows. This species has a tendency to bow-ride with vessels and may occur in the action area incidentally a few times per year. In March and April 2020, 8 individuals were identified across two sighting events during the Ward Cove Cruise Ship Dock Project (Power Systems and Supplies of Alaska, 2020). No sightings were observed from December 2019–January 2020 during the COK Rock Pinnacle Blasting Project (Sitkiewics, 2020).

Harbor Porpoise

In the eastern North Pacific Ocean, the harbor porpoise ranges from Point Barrow, along the Alaska coast, and down the west coast of North America to Point Conception, California. The Southeast Alaska stock ranges from Cape Suckling to the Canadian border (Muto *et al.,* 2021). Harbor porpoises frequent primarily coastal waters in Southeast Alaska (Dahlheim *et al.,* 2009) and occur most frequently in waters less than 100 m (328 ft) deep (Dahlhleim *et al.,* 2015). They are not attracted to areas with elevated levels of vessel activity and noise such as Tongass Narrows.

Studies of harbor porpoises reported no evidence of seasonal changes in distribution for the inland waters of Southeast Alaska (Dahlheim *et al.,* 2015). Ketchikan area densities are expected to be low. This is supported by anecdotal estimates. There were no sightings of harbor porpoises recorded during the December 2019–January 2020 COK Rock Pinnacle Blasting Project (Sitkiewics, 2020). However, 15 individual harbor porpoises were sighted across three separate sighting events in March and April 2020 during the Ward Cove Cruise Ship Dock Project (Power Systems and Supplies of Alaska, 2020). Therefore, harbor porpoises are expected to be present in the action area only a few times per year.

Elephant Seals

Northern elephant seals breed and give birth in California and Baja California, primarily on offshore islands (Stewart *et al.,* 1994). Spatial segregation in foraging areas between males and females is evident from satellite tag data (Le Beouf *et al.,* 2000). Males migrate to the Gulf of Alaska and western Aleutian Islands along the continental shelf to feed on benthic prey, while females migrate to pelagic areas in the Gulf of Alaska and the central North Pacific to feed on pelagic prey (Le Beouf *et al.,* 2000). Elephant seals spend a majority of their time at sea (average of 74.7 days during post breeding migration and an average of 218.5 days during the post-molting migration) (Robinson *et al.,* 2012). Although northern elephant seals are known to visit the Gulf of Alaska to feed, they are rarely found on the beaches of Alaska. However, recent anecdotal evidence suggests that their range is expanding northward, and one elephant seal has repeatedly been spotted within Ketchikan in and around local docks (ASE, 2022).

Humpback Whale

The humpback whale is found worldwide in all oceans. Prior to 2016, humpback whales were listed under the ESA as an endangered species worldwide. Following a 2015 global status review (Bettridge *et al.,* 2015), NMFS established 14 DPSs with different listing statuses (81 FR 62259; September 8, 2016) pursuant to the ESA. Humpback whales found in the project area are predominantly members of the Hawaii DPS, which is not listed under the ESA. However, based on a comprehensive photo-identification study, members of the Mexico DPS, which is listed as threatened, have a small potential to occur in Southeast Alaska as well. Members of different DPSs are known to intermix on feeding grounds; therefore, all waters off the coast of Alaska should be considered to have ESA-listed humpback whales. Approximately 1 percent of all humpback whales in Southeast Alaska and northern British Columbia are members of the listed Mexico DPS, while all others are members of the non-listed Hawaii DPS (Wade *et al.,* 2021). Therefore, in consultation with the Alaska Regional Office, NMFS believes

that the listed DPS of humpback whales is not likely to be encountered near the project area and, if perchance they are, required mitigation will be required of USCG to avoid take of the ESA listed DPS of humpback whales.

The DPSs of humpback whales that were identified through the ESA listing process do not equate to the existing MMPA stocks. The stock delineations of humpback whales under the MMPA are currently under review. Until this review is complete, NMFS considers humpback whales in Southeast Alaska to be part of the Central North Pacific stock, with a status of endangered under the ESA and designations of strategic and depleted under the MMPA (Muto *et al.,* 2021).

Humpback whales experienced large population declines due to commercial whaling operations in the early 20th century. Barlow (2003) estimated the population of humpback whales at approximately 1,200 animals in 1966. The population in the North Pacific grew between 6,000 and 8,000 by the mid-1990s. Current threats to humpback whales include vessel strikes, spills, climate change, and commercial fishing operations (Muto *et al.,* 2021).

Humpback whales are found throughout Southeast Alaska in a variety of marine environments, including open-ocean, near-shore waters, and areas within strong tidal currents (Dahlheim *et al.,* 2009). Most humpback whales are migratory and spend winters in the breeding grounds off either Hawaii or Mexico. Humpback whales generally arrive in Southeast Alaska in March and return to their wintering grounds in November. Some humpback whales depart late or arrive early to feeding grounds, and therefore the species occurs in the Southeast Alaska region year-round (Straley, 1990, Straley *et al.,* 2018). Across the region, there have been no recent estimates of humpback whale density.

No systematic studies have documented humpback whale abundance near Ketchikan. Anecdotal information suggests that this species is present in low numbers year-round in Tongass Narrows, with the highest abundance during summer and fall. Anecdotal reports suggest that humpback whales are seen only once or twice per month, while more recently it has been suggested that the occurrence is more regular, such as once per week on average, and more seasonal. Humpbacks observed in Tongass Narrows are generally alone or in groups of one to three individuals. In August 2017, a group of 6 individuals was observed passing through Tongass Narrows several times per day, for several days in a row.

The City of Ketchikan (COK) Rock Pinnacle project, which was located approximately 2.25 kilometers (km) north of USCG's proposed project site, reported one humpback whale sighting of one individual during the project (December 2019 through January 2020). During the Ward Cove Cruise Ship Dock Construction, located approximately 11 km northwest of the proposed project site, 28 sightings of humpbacks were made on eighteen days of in water work that occurred between February and September 2020, with at least one humpback being recorded every month. A total of 42 individuals were recorded and group sizes ranged from 1 to 6 (Power Systems & Supplies of Alaska, 2020). Humpback whales were sighted on 17 days out of 88 days of monitoring in Tongass Narrows in 2020 and 2021 (DOT&PF 2020, 2021a, 2021b, 2021c, 2021d). There were no sightings in January or February, but humpback whales were observed each month from October to December 2020 and May to June 2021. During November 2020, a single known individual (by fluke pattern) was observed repeatedly, accounting for 14 of the 26 sighting events that month (DOT&PF, 2020). During monitoring, humpback whales were observed on average once a week.

Southeast Alaska is considered an important area for feeding humpback whales between March and May (Ellison *et al.,* 2012), though not currently designated as critical habitat (86 FR 21082; April 21, 2021). In Alaska, humpback whales filter feed on tiny crustaceans, plankton, and small fish such as walleye Pollock, Pacific sand lance, herring, eulachon (*Thaleichthys pacificus*), and capelin (Witteveen *et al.,* 2012).

Minke Whale

Minke whales are found throughout the northern hemisphere in polar, temperate, and tropical waters. The population status of minke whales is considered stable throughout most of their range. Historically, commercial whaling reduced the population size of this species, but given their small size, they were never a primary target of whaling and did not experience the severe population declines as did larger cetaceans.

Minke whales are found in all Alaska waters. Minke whales in Southeast Alaska are part of the Alaska stock (Muto *et al.,* 2021). Research in Southeast Alaska have consistently identified individuals throughout inland waters in low numbers (Dahlheim *et al.,* 2009). All sightings were of single minke whales, except for a single sighting of multiple minke whales. Surveys took place in spring, summer, and fall, and minke whales were present in low numbers in all seasons and years. No information appears to be available on the winter occurrence of minke whales in Southeast Alaska.

There are no known occurrences of minke whales within the project area. Since their ranges extend into the project area and they have been observed in southeast Alaska, including in Clarence Strait (Dahlheim *et al.,* 2009), it is possible the species could occur near the project area. No minke whales were reported during the COK Rock Pinnacle Blasting Project (Sitkiewicz, 2020). During marine mammal monitoring of Tongass Narrows in 2020 and 2021, there were no minke whales observed over 88 days of observations across 7 months (October 2020–February 2021; May–June 2021) (DOT&PF 2020, 2021a, 2021b, 2021c, 2021d).

In Alaska, the minke whale diet consists primarily of euphausiids and walleye Pollock. Minke whales are generally found in shallow, coastal waters within 200 m of shore (Zerbini *et al.,* 2006) and are almost always solitary or in small groups of 2 to 3. In Alaska, seasonal movements are associated with feeding areas that are generally located at the edge of the pack ice (NMFS, 2014).

Gray Whale

Gray whales are distributed throughout the North Pacific Ocean and are found primarily in shallow coastal waters (Muto *et al.,* 2021). Gray whales in the Eastern North Pacific stock range from the southern Gulf of California, Mexico to the arctic waters of the Bering and Chukchi Seas. Gray whales are generally solitary creatures and travel together alone or in small groups.

Gray whales are rare in the action area and unlikely to occur in Tongass Narrows. They were not observed during the Dahlheim *et al.,* (2009) surveys of Alaska's inland waters with surveys conducted in the spring, summer and fall months. No gray whales were reported during COK Rock Pinnacle Blasting Project (Sitkiewicz, 2020) or Ward Cove (Power Systems & Supplies of Alaska, 2020). However, a gray whale could migrate through or near the project area during November especially.

There is an ongoing Unusual Mortality Event (UME) involving gray whales on the Pacific Coast (*https://www.fisheries.noaa.gov/national/marine-life-distress/2019-2021-gray-*

whale-unusual-mortality-event-along-west-coast-and). Almost half of the standings in the United States have been in Alaska. A definitive cause has not been found for the UME but many of the animals show signs of emaciation.

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. Current data indicate that not all marine mammal species have equal hearing capabilities (*e.g.,* Richardson *et al.,* 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007) recommended that marine mammals be divided into functional hearing groups based on directly measured or estimated hearing ranges on the basis of available behavioral response data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. 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.* 2,007) and PW pinniped (approximation).

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

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

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

This section includes a summary and discussion of the ways that components of the specified activity may impact marine mammals and their habitat. The Estimated Take section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The Negligible Impact Analysis and Determination section considers the content of this section, the Estimated Take section, and the Proposed Mitigation section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and how those impacts on individuals are likely to impact marine mammal species or stocks.

Acoustic effects on marine mammals during the specified activity can occur from impact pile driving, vibratory driving and DTH. The effects of underwater noise from USCG's proposed activities have the potential to result in Level A or Level B harassment of marine mammals in the action area.

Description of Sound Source

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

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

In-water construction activities associated with the project would include vibratory pile removal, impact and vibratory pile driving, and drilling. The sounds produced by these activities fall into one of two general sound types: Impulsive and non-impulsive. Impulsive sounds (*e.g.,* explosions, gunshots, sonic booms, impact pile driving) are typically transient, brief (less than 1 second), broadband, and consist of high peak sound pressure with rapid rise time and rapid decay (ANSI 1986; NIOSH 1998; ANSI 2005; NMFS 2018a). Non-impulsive sounds (*e.g.,* aircraft, machinery operations

such as drilling or dredging, vibratory pile driving, and active sonar systems) can be broadband, narrowband or tonal, brief or prolonged (continuous or intermittent), and typically do not have the high peak sound pressure with raid rise/decay time that impulsive sounds do (ANSI 1995; NIOSH 1998; NMFS 2018a). The distinction between these two sound types is important because they have differing potential to cause physical effects, particularly with regard to hearing (*e.g.,* Ward 1997 in Southall *et al.,* 2007).

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

A DTH hammer is essentially a drill bit that drills through the bedrock using a rotating function like a normal drill, in concert with a hammering mechanism operated by a pneumatic (or sometimes hydraulic) component integrated into the DTH hammer to increase speed of progress through the substrate (*i.e.,* it is similar to a ''hammer drill'' hand tool). Rock socketing involves using DTH equipment to create a hole in the bedrock inside of which the pile is placed to give it lateral and longitudinal strength. The sounds produced by the DTH method contain both a continuous non-impulsive component from the drilling action and an impulsive component from the hammering effect. Therefore, we treat DTH systems as both impulsive and non-impulsive sound source types simultaneously.

The likely or possible impacts of USCG's proposed activity on marine mammals could involve both non-acoustic and acoustic stressors. Potential non-acoustic stressors could result from the physical presence of equipment and personnel; however, any impacts to marine mammals are expected to be primarily acoustic in nature. Acoustic stressors include effects of heavy equipment operation during pile driving and drilling.

Acoustic Impacts

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

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

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

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

Depending on the degree (elevation of threshold in dB), duration (*i.e.,* recovery time), and frequency range of TTS, and the context in which it is experienced, TTS can have effects on marine mammals ranging from discountable to serious (similar to those discussed in auditory masking, below). For example, a marine mammal may be able to readily compensate for a brief, relatively small amount of TTS in a non-critical frequency range that takes place during a time when the animal is traveling

through the open ocean, where ambient noise is lower and there are not as many competing sounds present. Alternatively, a larger amount and longer duration of TTS sustained during a time when communication is critical for successful mother/calf interactions could have more serious impacts. We note that reduced hearing sensitivity as a simple function of aging has been observed in marine mammals, as well as humans and other taxa (Southall *et al.,* 2007), so we can infer that strategies exist for coping with this condition to some degree, though likely not without cost.

Currently, TTS data only exist for four species of cetaceans (bottlenose dolphin, beluga whale (*Delphinapterus leucas*), harbor porpoise, and Yangtze finless porpoise (*Neophocoena asiaeorientalis*)) and five species of pinnipeds exposed to a limited number of sound sources (*i.e.,* mostly tones and octave-band noise) in laboratory settings (Finneran 2015). TTS was not observed in trained spotted (*Phoca largha*) and ringed (*Pusa hispida*) seals exposed to impulsive noise at levels matching previous predictions of TTS onset (Reichmuth *et al.,* 2016). In general, harbor seals and harbor porpoises have a lower TTS onset than other measured pinniped or cetacean species (Finneran 2015). Additionally, the existing marine mammal TTS data come from a limited number of individuals within these species. No data are available on noise-induced hearing loss for mysticetes. For summaries of data on TTS in marine mammals or for further discussion of TTS onset thresholds, please see Southall *et al.,* (2007), Finneran and Jenkins (2012), Finneran (2015), and Table 5 in NMFS (2018). Installing piles for this project requires a combination of drilling, impact pile driving and vibratory pile driving. For this project, these activities would not occur at the same time and there would be pauses in activities producing the sound during each day. Given these pauses and that many marine mammals are likely moving through the ensonified area and not remaining for extended periods of time, the potential for TS declines.

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

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

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

Stress responses—An animal's perception of a threat may be sufficient to trigger stress responses consisting of some combination of behavioral responses, autonomic nervous system responses, neuroendocrine responses, or immune responses (*e.g.,* Seyle 1950; Moberg 2000). In many cases, an animal's first and sometimes most economical (in terms of energetic costs) response is behavioral avoidance of the potential stressor. Autonomic nervous system responses to stress typically involve changes in heart rate, blood pressure, and gastrointestinal activity. These responses have a relatively short duration and may or may not have a significant long-term effect on an animal's fitness.

Neuroendocrine stress responses often involve the hypothalamus-pituitary-adrenal system. Virtually all neuroendocrine functions that are affected by stress—including immune competence, reproduction, metabolism, and behavior—are regulated by pituitary hormones. Stress-induced changes in the secretion of pituitary hormones have been implicated in failed reproduction, altered metabolism, reduced immune competence, and behavioral disturbance (*e.g.,* Moberg 1987; Blecha 2000). Increases in the circulation of glucocorticoids are also equated with stress (Romano *et al.,* 2004).

The primary distinction between stress (which is adaptive and does not normally place an animal at risk) and ''distress'' is the cost of the response. During a stress response, an animal uses glycogen stores that can be quickly replenished once the stress is alleviated. In such circumstances, the cost of the stress response would not pose serious fitness consequences. However, when an animal does not have sufficient energy reserves to satisfy the energetic costs of a stress response, energy resources must be diverted from other functions. This state of distress will last until the animal replenishes its energetic reserves sufficient to restore normal function.

Relationships between these physiological mechanisms, animal behavior, and the costs of stress responses are well studied through controlled experiments and for both laboratory and free-ranging animals

(*e.g.,* Holberton *et al.,* 1996; Hood *et al.,* 1998; Jessop *et al.,* 2003; Krausman *et al.,* 2004; Lankford *et al.,* 2005). Stress responses due to exposure to anthropogenic sounds or other stressors and their effects on marine mammals have also been reviewed (Fair and Becker 2000; Romano *et al.,* 2002b) and, more rarely, studied in wild populations (*e.g.,* Romano *et al.,* 2002a). For example, Rolland *et al.,* (2012) found that noise reduction from reduced ship traffic in the Bay of Fundy was associated with decreased stress in North Atlantic right whales. These and other studies lead to a reasonable expectation that some marine mammals will experience physiological stress responses upon exposure to acoustic stressors and that it is possible that some of these would be classified as ''distress.'' In addition, any animal experiencing TTS would likely also experience stress responses (NRC, 2003), however distress is an unlikely result of this project based on observations of marine mammals during previous, similar projects in the area.

Masking—Sound can disrupt behavior through masking, or interfering with, an animal's ability to detect, recognize, or discriminate between acoustic signals of interest (*e.g.,* those used for intraspecific communication and social interactions, prey detection, predator avoidance, navigation) (Richardson *et al.,* 1995). Masking occurs when the receipt of a sound is interfered with by another coincident sound at similar frequencies and at similar or higher intensity, and may occur whether the sound is natural (*e.g.,* snapping shrimp, wind, waves, precipitation) or anthropogenic (*e.g.,* pile driving, shipping, sonar, seismic exploration) in origin. The ability of a noise source to mask biologically important sounds depends on the characteristics of both the noise source and the signal of interest (*e.g.,* signal-to-noise ratio, temporal variability, direction), in relation to each other and to an animal's hearing abilities (*e.g.,* sensitivity, frequency range, critical ratios, frequency discrimination, directional discrimination, age or TTS hearing loss), and existing ambient noise and propagation conditions. Masking of natural sounds can result when human activities produce high levels of background sound at frequencies important to marine mammals. Conversely, if the background level of underwater sound is high (*e.g.,* on a day with strong wind and high waves), an anthropogenic sound source would not be detectable as far away as would be possible under quieter conditions and would itself be masked.

Airborne Acoustic Effects—Although pinnipeds are known to haul-out regularly on man-made objects we believe that incidents of take resulting solely from airborne sound are unlikely due to the sheltered proximity between the proposed project area and these haulout sites (over 20 miles (32.19 km)). There is a possibility that an animal could surface in-water, but with head out, within the area in which airborne sound exceeds relevant thresholds and thereby be exposed to levels of airborne sound that we associate with harassment, but any such occurrence would likely be accounted for in our estimation of incidental take from underwater sound. Therefore, authorization of incidental take resulting from airborne sound for pinnipeds is not warranted, and airborne sound is not discussed further here. Cetaceans are not expected to be exposed to airborne sounds that would result in harassment as defined under the MMPA.

Marine Mammal Habitat Effects

The USCG's construction activities could have localized, temporary impacts on marine mammal habitat and their pretty by increasing in-water sound pressure levels and slightly decreasing water quality. However, since the focus of the proposed action is pile driving and drilling, no net habitat loss is expect as the floating dock will be a small extension of the current dock, replacing the location of the existing wave attenuator (see Figure 2). Construction activities are of short duration and would likely have temporary impacts on marine mammal habitat through increases in underwater and airborne sound. Increased noise levels may affect acoustic habitat (see masking discussion above) and adversely affect marine mammal prey in the vicinity of the project area (see discussion below). During DTH, impact and vibratory pile driving, elevated levels of underwater noise would ensonify the project area where both fish and mammals occur and could affect foraging success. Additionally, marine mammals may avoid the area during construction, however, displacement due to noise is expected to be temporary and is not expected to result in long-term effects to the individuals or populations.

Temporary and localized increase in turbidity near the seafloor would occur in the immediate area surrounding the area where piles are installed or removed. In general, turbidity associated with pile installation is localized to about a 25-ft (7.6 meter) radius around the pile (Everitt *et al.,* 1980). The sediments of the project site will settle out rapidly when disturbed. Cetaceans are not expected to be close enough to the pile driving areas to experience effects of turbidity, and any pinnipeds could avoid localized areas of turbidity. Local strong currents are anticipated to disburse any additional suspended sediments produced by project activities at moderate to rapid rates depending on tidal stage. Therefore, we expect the impact from increased turbidity levels to be discountable to marine mammals and do not discuss it further.

In-Water Construction Effects on Potential Foraging Habitat

The proposed activities would not result in permanent impacts to habitats used directly by marine mammals except for the actual footprint of the floating dock extension. The total seafloor area likely impacted by the project is relatively small compared to the available habitat in Southeast Alaska and does not include any Biologically Important Areas or other habitat of known importance. The area is highly influenced by anthropogenic activities. Additionally, the total seafloor area affected by pile installation and removal is a small area compared to the vast foraging area available to marine mammals in the area. At best, the impact area provides marginal foraging habitat for marine mammals and fishes. Furthermore, pile driving at the project site would not obstruct movements or migration of marine mammals.

Avoidance by potential prey (*i.e.,* fish) of the immediate area due to the temporary loss of this foraging habitat is also possible. The duration of fish avoidance of this area after pile driving stops is unknown, but a rapid return to normal recruitment, distribution and behavior is anticipated. Any behavioral avoidance by fish of the disturbed area would still leave significantly large areas of fish and marine mammal foraging habitat in the nearby vicinity.

Effects on Potential Prey

Sound may affect marine mammals through impacts on the abundance, behavior, or distribution of prey species (*e.g.,* crustaceans, cephalopods, fish, zooplankton, etc.). Marine mammal prey varies by species, season, and location. Here, we describe studies regarding the effects of noise on known marine mammal prey.

Fish utilize the soundscape and components of sound in their environment to perform important functions such as foraging, predator

avoidance, mating, and spawning (*e.g.,* Zelick and Mann, 1999; Fay, 2009). Depending on their hearing anatomy and peripheral sensory structures, which vary among species, fishes hear sounds using pressure and particle motion sensitivity capabilities and detect the motion of surrounding water (Fay *et al.,* 2008). The potential effects of noise on fishes depends on the overlapping frequency range, distance from the sound source, water depth of exposure, and species-specific hearing sensitivity, anatomy, and physiology. Key impacts to fishes may include behavioral responses, hearing damage, barotrauma (pressure-related injuries), and mortality.

Fish react to sounds which are especially strong and/or intermittent low-frequency sounds, and behavioral responses such as flight or avoidance are the most likely effects. Short duration, sharp sounds can cause overt or subtle changes in fish behavior and local distribution. The reaction of fish to noise depends on the physiological state of the fish, past exposures, motivation (*e.g.,* feeding, spawning, migration), and other environmental factors. Hastings and Popper (2005) identified several studies that suggest fish may relocate to avoid certain areas of sound energy. Additional studies have documented effects of pile driving on fish, although several are based on studies in support of large, multiyear bridge construction projects (*e.g.,* Scholik and Yan, 2001, 2002; Popper and Hastings, 2009). Several studies have demonstrated that impulse sounds might affect the distribution and behavior of some fishes, potentially impacting foraging opportunities or increasing energetic costs (*e.g.,* Fewtrell and McCauley, 2012; Pearson *et al.,* 1992; Skalski *et al.,* 1992; Santulli *et al.,* 1999; Paxton *et al.,* 2017). However, some studies have shown no or slight reaction to impulse sounds (*e.g.,* Pena *et al.,* 2013; Wardle *et al.,* 2001; Jorgenson and Gyselman, 2009; Popper *et al.,* 2015).

SPLs of sufficient strength have been known to cause injury to fish and fish mortality. However, in most fish species, hair cells in the ear continuously regenerate and loss of auditory function likely is restored when damaged cells are replaced with new cells. Halvorsen *et al.,* (2012a) showed that a TTS of 4–6 dB was recoverable within 24 hours for one species. Impacts would be most severe when the individual fish is close to the source and when the duration of exposure is long. Injury caused by barotrauma can range from slight to severe and can cause death, and is most likely for fish with swim bladders. Barotrauma injuries have been documented during controlled exposure to impact pile driving (Halvorsen *et al.,* 2012b; Casper *et al.,* 2013).

The most likely impact to fish from pile driving activities at the project areas would be temporary behavioral avoidance of the area. The duration of fish avoidance of an area after pile driving stops is unknown, but a rapid return to normal recruitment, distribution and behavior is anticipated.

Construction activities, in the form of increased turbidity, have the potential to adversely affect forage fish in the project area. Forage fish form a significant prey base for many marine mammal species that occur in the project area. Increased turbidity is expected to occur in the immediate vicinity (on the order of 10 ft (3 m) or less) of construction activities. However, suspended sediments and particulates are expected to dissipate quickly within a single tidal cycle. Given the limited area affected and high tidal dilution rates, any effects on forage fish are expected to be minor or negligible. Finally, exposure to turbid waters from construction activities is not expected to be different from the current exposure; fish and marine mammals in Tongass Narrows are routinely exposed to substantial levels of suspended sediment from natural and anthropogenic sources.

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

Estimated Take

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

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

Authorized takes would primarily be by Level B harassment, as use of the acoustic sources (*i.e.,* vibratory or impact pile driving and DTH) has the potential to result in disruption of behavioral patterns for individual marine mammals. There is also some potential for auditory injury (Level A harassment) to result, primarily for porpoises and harbor seals, due to the cryptic nature of these species in context of larger predicted auditory injury zones. Auditory injury is unlikely to occur for low- and mid-frequency species and otariids, based on the relatively small predicted zones for the latter two groups and because of the expected ease of detection for the former group. The proposed mitigation and monitoring measures are expected to minimize the severity of the taking to the extent practicable.

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

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) and the number of days of activities. We note that while these basic factors can contribute to a basic calculation to provide an initial prediction of takes, additional information that can qualitatively inform take estimates is also sometimes available (*e.g.,* previous monitoring results or average group size). Below, we describe the factors considered here in more detail and present the proposed take estimate.

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). Thresholds have also been developed identifying the received level of in-air sound above which exposed pinnipeds would likely be behaviorally harassed.

Level B Harassment for non-explosive sources—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 (*e.g.,* frequency, predictability, duty cycle), the environment (*e.g.,* bathymetry), and the receiving animals (hearing, motivation, experience, demography, behavioral context) and can be difficult to predict (Southall *et al.,* 2007, Ellison *et al.,* 2012). Based on what the available science indicates and the practical need to use a threshold based on a factor that is both predictable and measurable for most activities, NMFS uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS predicts that marine mammals are likely to be behaviorally harassed in a manner we consider Level B harassment when exposed to underwater anthropogenic noise above received levels of 120 dB re 1 microPascal (μPa) (rms) for continuous (*e.g.,* vibratory pile-driving, drilling) and above 160 dB re 1 μPa (rms) for non-explosive impulsive (*e.g.,* seismic airguns) or intermittent (*e.g.,* scientific sonar) sources. USCG's activity includes the use of continuous (vibratory hammer and DTH) and impulsive (DTH and impact pile-driving), and therefore the 120 and 160 dB re 1 μPa (rms) are applicable.

Level A harassment for non-explosive sources—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). USCG's proposed activity includes the use of impulsive (impact pile-driving and DTH) and non-impulsive (vibratory hammer and DTH) sources.

These thresholds are provided in Table 4 below. The references, analysis, and methodology used in the development of the thresholds are described in NMFS 2018 Technical Guidance, which may be accessed at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance.*

TABLE 4—THRESHOLDS IDENTIFYING THE ONSET OF PERMANENT THRESHOLD SHIFT

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

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

Note: Peak sound pressure (L_{pk}) has a reference value of 1 μPa, and cumulative sound exposure level (L_E) has a reference value of 1μPa^{2}s. In this Table, thresholds are abbreviated to reflect American National Standards Institute standards (ANSI 2013). However, peak sound pressure is defined by ANSI as incorporating frequency weighting, which is not the intent for this Technical Guidance. Hence, the subscript "flat" is being included to indicate peak sound pressure should be flat weighted or unweighted within the generalized hearing range. The subscript associated with cumulative sound exposure level thresholds indicates the designated marine mammal auditory weighting function (LF, MF, and HF cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The cumulative sound exposure level thresholds could be exceeded in a multitude of ways (*i.e.,* varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these acoustic thresholds will be exceeded.

Ensonified Area

Here, we describe operational and environmental parameters of the activity that will feed into identifying the area ensonified above the acoustic thresholds, which include source levels and transmission loss coefficient.

The sound field in the project area is the existing background noise plus additional construction noise from the proposed project. Marine mammals are expected to be affected via sound generated by the primary components of the project (*i.e.,* impact pile driving, vibratory pile driving, vibratory pile removal, and DTH).

In order to calculate distances to the Level A harassment and Level B harassment sound thresholds for the methods and piles being used in this project, NMFS used acoustic monitoring data from other locations to develop source levels for the various pile types, sizes and methods (Table 5).

TABLE 5—OBSERVED SOURCE LEVELS FOR PILE INSTALLATION AND REMOVAL

Activity	Peak SPL (re 1 μPa (rms))	RMS SPL (re 1 μPa (rms))	SEL (re 1 μPa (rms))	Source
DTH (24-inch Steel Pipe)	184	167	159	Heyvaert & Reyff, 2021.
Vibratory (24-inch Steel Pipe) *	175	162	160	Denes *et al.,* 2016.
Impact (24-Inch Steel Pipe)	207	194	178	Caltrans 2020.

Note: SELss = single strike sound exposure level; RMS = root mean square.

* Source levels proposed here differ from those used in USCG's application.

When the NMFS Technical Guidance (2016) was published, in recognition of the fact that ensonified area/volume could be more technically challenging to predict because of the duration component in the new thresholds, we developed a User Spreadsheet that includes tools to help predict a simple isopleth that can be used in conjunction with marine mammal density or occurrence to help predict takes. We note that because of some of the assumptions included in the methods used for these tools, we anticipate that isopleths produced are typically going to be overestimates of some degree, which may result in some degree of overestimate of Level A harassment take. However, these tools offer the best way to predict appropriate isopleths when more sophisticated 3D modeling methods are not available, and NMFS continues to develop ways to quantitatively refine these tools, and will qualitatively address the output where appropriate. For stationary sources such as vibratory and impact pile driving, vibratory removal and DTH, NMFS User Spreadsheet predicts the distance at which, if a marine mammal remained at that distance the whole duration of the activity, it would incur PTS. Inputs used in the User Spreadsheet are reported in Table 1 and source levels used in the User Spreadsheet are reported in Table 5. Resulting isopleths are reported in Table 6.

TABLE 6—LEVEL A AND LEVEL B HARASSMENT ISOPLETHS FOR IMPACT PILE DRIVING

Activity	Level A harassment isopleths (PTS) (meters)					Level B harassment isopleths (m)
	LF	MF	HF	Phocids	Otariids	
DTH (24-inch Steel Pipe)	434.1	15.4	517.1	232.3	16.9	13,594
Vibratory (24-inch Steel Pipe)	1	0.1	1.5	0.6	0.1	*6,310
Impact (24-Inch Steel Pipe)	21.5	0.8	25.6	11.5	0.8	1,848

* Differs from USCG's application due to difference in source level use. See Table 5.

Marine Mammal Occurrence and Take Calculation and Estimation

In this section we provide the information about the presence, density, or group dynamics of marine mammals that will inform the take calculations. We also describe how the information provided above is brought together to produce a quantitative take estimate.

Available information regarding marine mammal occurrence and abundance in the vicinity of USCG Base Ketchikan includes monitoring reports from prior incidental take authorizations (the Tongass Narrows project (85 FR 673; January 7, 2020)) and ESA consultations on additional projects and is described below for each species. A summary of proposed take is in Table 7.

Steller Sea Lions

Steller sea lions are anticipated to occur in the vicinity of Base Ketchikan in the Tongass Narrows. As Base Ketchikan is far enough east of the line dividing the Eastern and Western stocks, only members of the Eastern Stock of Steller sea lions are anticipated to occur at Base Ketchikan. Sightings of Steller sea lions are expected to occur once a day with the total number of Steller sea lions in the project area reaching up to 10 animals. The project involves 30 days of potential in-water work. Therefore, we estimate total take at 10 sea lions × 30 days = 300 takes at the Level B harassment level. Because the shutdown zone is small and Steller sea lions are not cryptic, we believe the Level A harassment shutdown zone can be fully implemented by Protected Species Observers (PSOs) and no Level A harassment take is proposed for authorization.

Harbor Seal

Harbor seals are anticipated to occur in the project area once per day. The typical number of harbor seals observed in the project area is up to 12 animals per day. We estimate total take at 12 seals × 30 days of activity = 360 takes. Because of the relatively large Level A harassment zones for impact pile driving and DTH, and because harbor seals are small and cryptic species that could sometimes remain undetected within the estimated harassment zones for a duration sufficient to experience PTS, we propose to authorize 10 takes (1 seal per day for the expected 10 days of impact pile driving and DTH) by Level A harassment, and 350 takes by Level B harassment, equaling the total proposed authorized take to 360.

Dall's Porpoise

Previous construction project monitoring in the Ketchikan area reported approximately two Dall's porpoises per day (NMFS, 2021). Therefore, we estimate total take at 2 porpoises per day × 30 days = 60 takes. Forty of these takes are expected to be Level B harassment takes. Because Dall's porpoises are small and cryptic species and could sometimes remain undetected within the estimated harassment zones for a duration sufficient to experience PTS, we proposed to authorize 20 takes by Level A harassment.

Harbor Porpoise

Harbor porpoises are expected to occur in the project area no more than three times per month and the typical group size for harbor porpoises in the project area is 5 animals. The project involves 30 days (1 month) of in-water work where take could occur. Therefore, we estimate total take at 5 porpoises × 3 sightings = 15 takes. Because harbor porpoises are small and cryptic species and could remain undetected within the estimated harassment zones for a duration sufficient to experience PTS, we propose to authorize 5 takes by Level A harassment and 10 takes by Level B harassment.

Pacific White-Sided Dolphin

Previous construction project monitoring in the Ketchikan area reported approximately 2.86 Pacific white-sided dolphins per day (reported value of 20 dolphins over one week of monitoring) (NMFS, 2021). Therefore we estimate 2.86 dolphins × 30 days = 86 takes. All of these takes are expected to be by Level B harassment as we believe the Level A shutdown zones can be fully implemented by PSOs due to their large group size, short dive duration, and easy detection of Pacific white-sided dolphins, in addition to the smaller size of the shutdown zones.

Killer Whale

Killer whales are expected to occur in the project area no more than once per month. Typically a group size for killer whales in the project area is conservatively estimated at 10 animals, which equates to 0.4 animals per day. Therefore, we estimate total take at 0.4 whales × 30 days = 12 takes. All of these takes are expected to be Level B harassment takes as we believe the Level A shutdown zones can be fully

implemented by PSOs because of the large size of the animal, short dive duration, and obvious behavior of killer whales, in additional to the small size of the shutdown zones.

Gray Whale

Gray whales are expected to occur no more than once per month. Typical group size for gray whales in the project area is two animals. Therefore, we conservatively propose to authorize a single group size for the full 30 days of activity. All of these takes are expected to be by Level B harassment as we believe the Level A harassment shutdown zone can be fully implemented by PSOs because of the large size of the animal, short dive duration, and obvious behaviors of gray whales.

Minke Whales

Minke whales have not been previously observed in the project area but have a potential to occur. They are often solitary animals. Therefore, we conservatively propose to authorize a single take of minke whales. This one estimated take is expected to be by Level B harassment as we believe the Level A shutdown zones can be fully implemented by PSOs because of the large size of the animal, the short dive duration, and obvious behaviors of minke whales.

Northern Elephant Seals

Members of the California breeding stock spend most of their time at sea and are known to migrate to the Gulf of Alaska to feed on benthic prey. Recent anecdotal evidence has suggested that an animal may be present near Base Ketchikan and repeated sightings of that individual have been spotted near Ketchikan docks. Elephant seals are known to dive for extended periods of time and it is possible that one individual may be encountered within the Level B harassment zone. Therefore one estimated take by Level B harassment per day is proposed to be authorized, bring the total proposed authorized take of Elephant seals to 30. We believe the entire Level A shutdown zone can be fully implemented given their large size and obvious behaviors of elephant seals.

Humpback Whales

Members of the Western North Pacific stock have the potential to occur at Base Ketchikan. Previous construction project monitoring in the Ketchikan area reported approximately 0.571 whales per day during those activities (NMFS, 2021). Therefore, we estimate total take at 0.571 whales per day × 30 days = 17 takes by Level B harassment only. We do not anticipate any takes by Level A harassment as we believe the Level A shutdown zone can be fully implemented by PSOs because of their larger size, short dive duration, and obvious behaviors of humpback whales.

Given data in Wade *et al.,* (2021) discussed above on the relative frequencies of the Hawaii and Mexico DPS humpback whales in the project area, only 2 percent of the local population is expected to comprise of the Mexico DPS, equating to 0.34 of the 17 humpback whale takes proposed for authorization. Therefore, no takes of Mexico DPS whales are expected to occur.

TABLE 7—PROPOSED AUTHORIZED AMOUNT OF TAKING

Species	Stock	Level A	Level B	Total	Percent of stock
Humpback whale	Central North Pacific	0	17	17	0.17
Minke whale	Alaska	0	1	1	N/A
Killer whale	Alaska Resident	0	12	12	0.51
	Northern Resident				3.97
	West Coast Transient				3.44
Pacific-white sided dolphin	North Pacific	0	86	86	0.32
Harbor porpoise	Southeast Alaska	5	10	15	0.13
Dall's porpoise	Alaska Stock	20	40	60	0.46
Gray whale	Eastern North Pacific	0	2	2	0.01
Harbor seal	Clarence Strait	10	340	360	1.30
Northern Elephant Seal	California Breeding Stock	0	30	30	0.00
Steller sea lion	Eastern	0	300	300	0.69

Proposed Mitigation

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses. 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, we carefully consider 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, as well as subsistence uses. 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, impact on operations, and, in the case of a military readiness activity, personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity.

To ensure no take of any ESA listed whales, there are a number of mitigation measures proposed by USCG that go beyond, or are in addition to, typical mitigation measures we would

otherwise require for this project, as determined through informal ESA Section 7 consultation. The mitigation measures are proposed in the IHA:

• Avoid direct physical interaction with marine mammals during construction activity. If a marine mammal comes within 10 m of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions (note that NMFS expects that a 10 m shutdown zone is sufficient to avoid direct physical interaction with marine mammals, but USCG has conservatively proposed a 20 m shutdown zone to avoid physical interaction for in-water activities);

• Ensure that construction supervisors and crews, the monitoring team, and relevant USCG 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;

• 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;

• For any marine mammal species for which take by Level B harassment has not been requested or authorized, in-water pile installation/removal and DTH will shut down immediately when the animals are sighted;

• Employ a minimum of three PSOs for all DTH and pile driving activities, where one PSO is assigned to the active pile driving or DTH site to monitor shutdown zones and as much of the Level B harassment zones as possible. Two additional PSOs are required to start at the project site and travel along the Tongass Narrows, counting all humpback whales present, until they have reached the edge of the respective Level B harassment zone. At this point, the PSOs will identify suitable observation points from which to observe the width of Tongass Narrows for the duration of DTH and pile driving activities. For the largest zones, these are expected to be on South Tongass Highway near Mountain Point and North Tongass Highway just northwest of the intersection with Carlanna Creek.

• The placement of the PSOs during all pile driving and removal and DTH activities will ensure that the entire shutdown zone is visible during activity;

• Monitoring must take place from 30 minutes prior to initiation of pile driving or DTH activity (*i.e.,* pre-clearance monitoring) through 30 minutes post-completion of pile driving or DTH activity;

• If in-water work ceases for more than 30 minutes, USCG will conduct pre-clearance monitoring of both the Level B harassment zone and the shutdown zone;

• 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 8 are clear of marine mammals. Pile driving and DTH may commence following 30 minutes of observation when the determination is made that the shutdown zones are clear of marine mammals;

• If a marine mammal is observed entering or within the shutdown zones indicated in Table 8, pile driving and DTH must be delayed or halted. If pile driving is 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 8) or 15 minutes have passed without re-detection of the animal (30 minutes for large cetaceans);

• For humpback whales, if the boundaries of the harassment zone have not been monitored continuously during a work stoppage, the entire harassment zone will be surveyed again to ensure that no humpback whales have entered the harassment zone that were not previously accounted for; and

• In water activities will take place only: Between civil dawn and civil dusk when PSOs can effectively monitor for the presence of marine mammals; during conditions with a Beaufort Sea State of 4 or less; when the entire shutdown zone and adjacent waters are visible (*e.g.,* monitoring effectiveness in not reduced due to rain, fog, snow, etc.). Pile driving may continue for up to 30 minutes after sunset during evening civil twilight, as necessary to secure a pile for safety prior to demobilization during this time. The length of the post-activity monitoring period may be reduced if darkness precludes visibility of the shutdown and monitoring zones.

The following specific mitigation measures will also apply to USCG's in-water construction activities:

Establishment of Level A Harassment and Shutdown Zones—For all pile driving/removal and DTH activities, USCG will establish a shutdown zone (Table 8). The purpose of a shutdown zone is generally to define an area within which shutdown of activity would occur upon sighting of marine mammal (or in anticipation of an animal entering the defined area). Shutdown zones vary based on activity type and duration and marine mammal hearing group (Table 8). All shutdown zones are based on the Level A harassment isopleth for the associated activity. The placement of PSOs during all construction activities (described in detail in the Proposed Monitoring and Reporting Section) will ensure that the entire shutdown zones are visible during pile installation.

TABLE 8—PROPOSED SHUTDOWN ZONES AND LEVEL B HARASSMENT ISOPLETHS

Activity	Shutdown zone (m)					Level B harassment zone (m)
	Low-frequency	Mid-frequency	High-frequency	Phocid	Otariid	
Vibratory	20	20	20	20	20	13,594
DTH	440	20	520	240	20	6,310
Impact	30	20	30	20	20	1,848

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

Proposed Monitoring and Reporting

In order to issue an IHA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of such taking. The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area. 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 action; 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).
- Mitigation and monitoring effectiveness.

Visual Monitoring

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

- PSOs must be independent (*i.e.,* not construction personnel) 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 activities pursuant to a NMFS-issued IHA. 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 PSO during construction activity pursuant to a NMFS-issued IHA. 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 must be approved by NMFS prior to beginning any activity subject to this IHA; 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 prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, 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.

USCG must employ three PSOs during all pile driving and DTH activities. A minimum of one PSO (the lead PSO) must be assigned to the active pile driving or DTH location to monitor the shutdown zones and as much of the Level B harassment zones as possible. Two additional PSOs are also required. The additional PSOs will start at the project site and travel along Tongass Narrows, counting all humpback whales present, until they have reached the edge of the respective Level B harassment zone. At this point, the PSOs will identify suitable observation points from which to observe the width of Tongass Narrows for the duration of DTH and pile driving activities. For the largest zones, these are expected to be on the South Tongass Highway near Mountain Point and north Tongass Highway just northwest of the intersection with Carlanna Creek. If visibility deteriorates so that the entire width of Tongass Narrows at the harassment zone boundary is not visible, additional PSOs may be positioned so that the entire width is visible, or work will be halted until the entire width is visible to ensure that any humpback whales entering or are within the harassment zone are detected by PSOs.

Reporting

A draft marine mammal monitoring report will be submitted to NMFS within 90 days after the completion of pile driving and removal activities, or 60 days prior to a requested date of issuance from any future IHAs for projects at the same location, whichever comes first. The report will include an overall description of work completed, a narrative regarding marine mammal sightings, and associated PSO data sheets. Specifically, the report must include:

- Dates and times (begin and end) of all marine mammal monitoring;
- Construction activities occurring during each daily observation period, including the number and type of piles driven or removed and by what method (*i.e.,* impact, vibratory or DTH) and the total equipment duration for vibratory removal or DTH for each pile or hole 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 the time of sighting; Time of sighting; Identification of the animal(s) (*e.g.,* genus/species, lowest possible taxonomic level, or unidentifiable), 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 sightings (if pile driving was occurring

at time of sighting); Estimated number of animals (min/max/best estimate); Estimated number of animals by cohort (adults, juveniles, neonates, group composition, 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;
- Detailed information about any implementation of any mitigation triggered (*e.g.,* shutdowns and delays), a description of specific actions that ensured, and resulting changes in behavior of the animal(s), if any; and
- If visibility degrades to where PSO(s) cannot view the entire harassment zones, additional PSOs may be positioned so that the entire width is visible, or work will be halted until the entire width is visible to ensure that any humpback whales entering or within the harassment zone are detected by PSOs.

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

Reporting Injured or Dead Marine Mammals

In the 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 (OPR) (*PR.ITP.MonitoringReports@noaa.gov*), NMFS and to the Alaska Regional Stranding Coordinator as soon as feasible. If the death or injury was clearly caused by the specified activity, USCG 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 IHA. The IHA-holder must not resume their activities until notified by NMFS. The report must include the following information:

- Time, date, and location (latitude/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 responses (*e.g.,* intensity, duration), the context of any responses (*e.g.,* critical reproductive time or location, migration), 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's 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 environmental 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, our analysis applies to all species listed in Table 2 for which take could occur, given that NMFS expects the anticipated effects of the proposed pile driving/removal and DTH on different marine mammal stocks to be 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, NMFS has identified species-specific factors to inform the analysis.

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. Potential takes could occur if individuals are present in the ensonified zone when these activities are underway.

The Level A harassment zones identified in Table 6 are based upon an animal exposed to impact pile driving or DTH up to two piles per day. Given the short duration to impact drive or vibe, or use DTH drilling, each pile and break between pile installations (to reset equipment and move piles into place), an animal would have to remain within the area estimated to be ensonified above the Level A harassment threshold for multiple hours. This is highly unlikely give marine mammal movement in the area. If an animal was exposed to accumulated sound energy, the resulting PTS would likely be small (*e.g.,* PTS onset) at lower frequencies where pile driving energy is concentrated, and unlikely to result in impacts to individual fitness, reproduction, or survival.

The nature of the pile driving project precludes the likelihood of serious injury or mortality. For all species and stock, take would occur within a limited, confined area (adjacent to the project site) of the stock's range. Level A and Level B harassment will be reduced to the level of least practicable adverse impact through use of mitigation measures described herein. Further, the amount of take proposed to be authorized is extremely small when compared to stock abundance.

Behavioral responses of marine mammals to pile driving, pile removals, and DTH at the sites in Tongass Narrows are expected to be mild, short term, and temporary. 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. Given that pile driving, pile removal and DTH would occur for only a portion of the project's duration, any harassment occurring would be temporary. Additionally, many of the species present in region would only be present temporarily based on seasonal patterns or during transit between other habitats. These temporary present species would be

exposed to even smaller periods of noise-generating activity, further decreasing the impacts.

For all species except humpback whales, there are no known Biologically Important Areas (BIAs) near the project area that would be impacted by USCG's planned activities. For humpback whales, the whole Southeast of Alaska is a seasonal BIA from March through November (Ferguson *et al.,* 2015), however, Tongass Narrows and the Clarence Strait are not important portions of this habitat due to human development and presence. The Tongass Narrows is also a small passageway and represents a very small portion of the total available habitat. In addition, while the southeast Alaska is considered an important area for feeding humpback whales between March and May (Ellison *et al.,* 2012), it is not currently designated as critical habitat for humpback whales (86 FR 21082; April 21, 2021).

In addition, it is unlikely that minor noise effects in a small, localized area of habitat would have any effect on each stock's ability to recover. In combination, we believe that these factors, as well as the available body of evidence from other similar activities, demonstrate that the potential effects of the specified activities will have only minor, short-term effects on individuals. The specified activities are not expected to impact rates of recruitment or survival and will therefore not result in population-level impacts.

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

- No mortality is anticipated or authorized.
- Authorized Level A harassment would be very small amounts and of low degree;
- 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;
- For all species, the Tongass Narrows is a very small and peripheral part of their range;
- USCG would implement mitigation measures including soft-starts and shutdown zones to minimize the numbers of marine mammals exposed to injurious levels of sound, and to ensure that take by Level A harassment is, at most, a small degree of PTS;
- Monitoring reports from similar work in the Tongass Narrows have documented little to no effect on individuals of the same species impacted by the specified activity.

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

Small Numbers

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

The amount of take NMFS proposes to authorize is below one third of the estimated stock abundance for all species (in fact, take of individuals is less than five percent of the abundance of the affected stocks, see Table 7). This is likely a conservative estimate because we assume all takes are of different individual animals, which is likely not the case. Some individuals may return multiple times in a day, but PSOs would count them as separate takes if they cannot be individually identified.

The most recent estimate for the Alaska stock of Dall's porpoise was 13,110 animals however this number just accounts for a portion of the stock's range. Therefore, the 60 takes of this stock proposed for authorization is believed to be an even smaller portion of the overall stock abundance.

Likewise, the Southeast Alaska stock of harbor porpoise has no official NMFS abundance estimate as the most recent estimate is greater than eight years old. The most recent estimate was 11,146 animal (Muto *et al.,* 2021) and it is highly unlikely this number has drastically declined. Therefore, the 15 takes of this stock proposed for authorization clearly represent small numbers of this stock.

There is no current or historical estimate of the Alaska minke whale stock, but there are known to be over 1,000 minke whales in the Gulf of Alaska (Muto *et al.,* 2018) so the 1 take proposed for authorization clearly represents 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 USCG's project area impacts a very small portion of this range. Therefore, the singular take of minke whale proposed for authorization is small relative to estimated survey abundance, even if each proposed take occurred to a new individual.

Based on the analysis contained herein of the proposed activity (including the proposed mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS preliminarily finds that small numbers of marine mammals 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 Native hunters in the Ketchikan vicinity do not traditionally harvest cetaceans (Muto *et al.,* 2021). To date, there are no reports of subsistence takes of killer whale, Pacific white-sided dolphin, harbor porpoise, or Dall's porpoise within Alaska (Muto *et al.,* 2021). Harbor seals are the most commonly targeted marine mammal that is hunted by Alaska Native subsistence hunters within the Ketchikan area. In 2012, an estimated 595 harbor seals were taken for subsistence uses, with 22

of those occurring in Ketchikan (Wolfe *et al.,* 2013). Statewide data are no longer being consistently collected for subsistence harvest of Steller sea lions, however subarea collect does occur periodically. In 2012, hunters in Southeast Alaska took an estimated nine sea lions for subsistence use (Wolfe *et al.,* 2013). Sea lions were taken in two communities (Hoonah and Sitka) by three hunters. There are no known haulout locations in the project area. Both the harbor seal and Steller sea lion may be temporarily displaced from the action are However, neither the local population nor any individual pinniped are likely to be adversely impacted by the proposed action beyond noise-induced harassment or slight injury. The proposed project is anticipated to have no long-term impacts on either species' populations, or their habitats. No long-term impacts on the availability of marine mammals for subsistence uses is anticipated.

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

Endangered Species Act

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

No incidental take of ESA-listed species is proposed for authorization or expected to result from this activity. Therefore, NMFS has determined that formal consultation under section 7 of the ESA is not required for this action.

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to the United States Coast Guard for construction associated with the floating dock extension project in Ketchikan, Alaska, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. A draft of the proposed IHA can be found at *https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act.*

Request for Public Comments

We request comment on our analyses, the proposed authorization, and any other aspect of this notice of proposed IHA for the U.S. Coast Guard's construction of a floating dock at Base Ketchikan We also request at this time comment on the potential Renewal of this proposed IHA as described in the paragraph below. Please include with your comments any supporting data or literature citations to help inform decisions on the request for this IHA or a subsequent Renewal IHA.

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

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

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

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

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

Dated: May 16, 2022.

Kimberly Damon-Randall,

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

[FR Doc. 2022–10938 Filed 5–19–22; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XC043]

Fisheries of the Gulf of Mexico; Southeast Data, Assessment, and Review (SEDAR); Public Meeting

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

ACTION: Notice of SEDAR 75 Shore Mode Topical Working Group scoping webinar for Gulf of Mexico gray snapper.

SUMMARY: The SEDAR 75 assessment of Gulf of Mexico gray snapper will consist of a series of assessment webinars. See **SUPPLEMENTARY INFORMATION**.

DATES: The SEDAR 75 scoping webinar for the Shore Mode Topical Working Group will be held June 15, 2022, from 10 a.m. until 12 p.m., Eastern. The established times may be adjusted as necessary to accommodate the timely completion of discussion relevant to the assessment process. Such adjustments may result in the meeting being extended from or completed prior to the time established by this notice.

ADDRESSES:

Meeting address: The meeting will be held via webinar. The webinar is open to members of the public. Those interested in participating should contact Julie A. Neer at SEDAR (see **FOR FURTHER INFORMATION CONTACT**) to request an invitation providing webinar access information. Please request webinar invitations at least 24 hours in advance of each webinar.

SEDAR address: 4055 Faber Place Drive, Suite 201, North Charleston, SC 29405.

FOR FURTHER INFORMATION CONTACT: Julie A. Neer, SEDAR Coordinator; phone: (843) 571–4366; email: *Julie.neer@safmc.net.*

SUPPLEMENTARY INFORMATION: The Gulf of Mexico, South Atlantic, and