DEPARTMENT OF COMMERCE

International Trade Administration

[A–533–897]

Utility Scale Wind Towers From India: Postponement of Final Determination of Sales at Less Than Fair Value Investigation

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (Commerce) is postponing the deadline for issuing the final determination in the less-than-fair-value (LTFV) investigation of utility scale wind towers (wind towers) from India until October 6, 2021, and is extending the provisional measures from a four-month period to a period of not more than six months.

DATES: Applicable July 20, 2021.

FOR FURTHER INFORMATION CONTACT: Terre Keaton or Amaris Wade, AD/CVD Operations, Office II, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–1280 or (202) 482–3874, respectively.

SUPPLEMENTARY INFORMATION:

Background

On November 9, 2020, Commerce initiated an LTFV investigation of imports of wind towers from India.[1] The period of investigation is July 1, 2019, through June 30, 2020. On May 24, 2021, Commerce published the *Preliminary Determination.*[2]

Postponement of Final Determination

Section 735(a)(2) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.210(b)(2) provide that a final determination may be postponed until not later than 135 days after the date of the publication of the preliminary determination if, in the event of an affirmative preliminary determination, a request for such postponement is made by the exporters or producers who account for a significant proportion of exports of the subject merchandise, or in the event of a negative preliminary determination, a request for such postponement is made by the petitioners. Further, 19 CFR 351.210(e)(2) requires that such postponement requests by exporters be accompanied by a request for extension of provisional measures from a four-month period to a period of not more than six months, in accordance with section 733(d) of the Act.

On July 7, 2021, Vestas Wind Technology India Private Limited (Vestas India), the mandatory respondent in this investigation, requested that Commerce postpone the deadline for the final determination until no later than 135 days from the publication of the *Preliminary Determination,* and extend the application of the provisional measures from a four-month period to a period of not more than six months.[3] In accordance with section 735(a)(2)(A) of the Act and 19 CFR 351.210(b)(2)(ii), because: (1) The *Preliminary Determination* was affirmative; (2) the request was made by an exporter/producer who accounts for a significant proportion of exports of the subject merchandise; and (3) no compelling reasons for denial exist, Commerce is postponing the final determination until no later than 135 days after the date of the publication of the *Preliminary Determination,* and extending the provisional measures from a four-month period to a period of not more than six months. Accordingly, Commerce will issue its final determination no later than October 6, 2021.[4]

Notice to Interested Parties

This notice is issued and published pursuant to section 735(a)(2) of the Act and 19 CFR 351.210(g).

Dated: July 14, 2021.

Christian Marsh,

Acting Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2021–15412 Filed 7–19–21; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See Utility Scale Wind Towers from India, Malaysia, and Spain: Initiation of Less-Than-Fair-Value Investigations,* 85 FR 73023 (November 16, 2020).

[2] *See Utility Scale Wind Towers from India: Preliminary Affirmative Determination of Sales at Less Than Fair Value,* 86 FR 27829 (May 24, 2021) (*Preliminary Determination*).

[3] *See* Vestas India's Letter, ''Request to Extend the Deadline for the Final Determination,'' dated July 7, 2021.

[4] Because Commerce previously aligned the deadline for the final determination of the companion countervailing duty (CVD) investigation of wind towers from India with this deadline for this investigation, the deadline for issuing the final determination in the CVD investigation is also October 6, 2021. *See Utility Scale Wind Towers from India: Preliminary Affirmative Countervailing Duty Determination, and Alignment of Final Determination With Final Antidumping Duty Determination,* 86 FR 15897 (March 25, 2021).

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XB128]

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the Naval Base Point Loma Fuel Pier Inboard Pile Removal Project

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 Navy (Navy) for authorization to take marine mammals incidental to the Fuel Pier Inboard Pile Removal Project at Naval Base Point Loma in San Diego Bay, California. 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 August 19, 2021.

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.Potlock@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: Kelsey Potlock, 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 would 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 February 3, 2021, NMFS received a request from the United States Navy (Navy) for an IHA to take marine mammals' incidental to pile removal activities at Naval Base Point Loma in San Diego Bay, California. We submitted questions to the Navy on the application on March 12, 2021. We received responses on March 23, 2021; April 5, 2021; May 5, 2021; and May 12, 2021. Meetings between NMFS, the Navy, and their contractors were held on May 12, 2021 and May 24, 2021. A final revised version was received by NMFS on May 24, 2021. The application was deemed adequate and complete on May 17, 2021. The Navy's request is for the take of a small number of six species of marine mammals by Level B harassment only. Neither the Navy nor NMFS expects serious injury or mortality to result from these activities. Therefore, an IHA is appropriate.

Naval Base Point Loma provides berthing and support services for Navy submarines and other fleet assets. The existing fuel pier previously served as a fuel depot for loading and unloading fuel. Naval Base Point Loma is the only active Navy fueling facility in southern California. The current project is to remove piles that were part of the old pier that was replaced over the past few years. This proposed IHA includes up to 84 days of in-water pile removal activities.

NMFS has previously issued incidental take authorizations to the Navy for similar activities over the past 8 years at Naval Base Point Loma in San Diego Bay, including IHAs issued effective from September 1, 2013, through August 31, 2014 (78 FR 44539, July 24, 2013; Year 1 Project), October 8, 2014 through October 7, 2015 (79 FR 65378, November 4, 2014; Year 2 Project), October 8, 2015 through October 7, 2016 (80 FR 62032, October 15, 2015; Year 3 Project), October 8, 2016 through October 7, 2017 (81 FR 66628, September 28, 2016; Year 4 Project), October 8, 2017 through October 7, 2018 (82 FR 45811, October 2, 2017; Year 5 Project), September 15, 2020 through September 14, 2021 (85 FR 33129, June 1, 2020; Floating Dry Dock Project), and October 1, 2021 through September 30, 2022 (86 FR 7993, February 3, 2021; Pier 6 Replacement Project). The Navy has complied with all the requirements (*e.g.,* mitigation, monitoring, and reporting) of past IHAs. Monitoring reports from these activities are available on NMFS website (*https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities*).

Description of Proposed Activities

Overview

The purpose of the proposed project is to remove old piles from the Fuel Pier at Naval Base Point Loma to allow for continued Naval Fleet readiness activities. Specifically, in-water construction work includes the removal of 409 piles by a variety of techniques (*i.e.,* one to two pile clippers, an underwater chainsaw, a diamond wire saw, or a vibratory hammer, possibly with assistance from a diver). Concurrent pile removal may occur for some piles through the use of two pile clippers only. The piles include an estimated 12 13-inch diameter polycarbonate fender piles, 56 14-inch diameter concrete fender piles, and 341 16-inch diameter concrete structural piles.

Dredging activities would occur both during and after pile removal and within the one-year period of the IHA. However, take of marine mammals is not expected to result from the NBPL dredging activities, the Navy did not request take incidental to dredging activities, and they are not discussed further.

The pile removal activities can result in the take of marine mammals from the sounds produced in the water, which could result in behavioral harassment or auditory injury to marine mammals within the estimated isopleths.

Dates and Duration

The work described in this proposed IHA is scheduled to begin January 15,

2022 and be valid for one year after the start date (end January 14, 2023). Under the terms of a previously developed Memorandum of Understanding (MOU) between the Navy and the U.S. Fish and Wildlife Service (USFWS), the Navy would only be performing in-water activities during a 196-day period from September 16 to March 31 to not interfere with the California least tern (*Sterna antillarum browni*) nesting season.

Pile removal is planned to occur during daylight hours only over 84 days within the previously described 196 day period. Per the Navy's application, daylight hours constitute no earlier than 45 minutes after sunrise or later than 45 minutes before sunset.

Specific Geographic Region

The activities would occur near the mouth of the San Diego Bay (Figure 1). San Diego Bay is a narrow, crescent-shaped natural embayment oriented northwest-southeast with an approximate length of 24 kilometers (km) (15 miles (mi)) and a total area of roughly 4 km² (11,000 acres; Port of San Diego, 2007). The width of the Bay ranges from 0.3 to 5.8 km (0.2 to 3.6 mi), and depths range from 23 m (74 ft) MLLW near the tip of Ballast Point to less than 1.2 m (4 ft) at the southern end (Merkel and Associates, Inc., 2009). Approximately half of the Bay is less than 4.5 meters (m) (15 feet (ft)) deep and much of it is less than 15 m (50 ft) deep (Merkel and Associates, Inc., 2009). The northern and central portions of the Bay have been shaped by historical dredging and filling to support large ship navigation and shoreline development. The United States Army Corps of Engineers dredges the main navigation channel in the Bay to maintain a depth of 14 m (47 ft) MLLW and is responsible for providing safe transit for private, commercial, and military vessels within the bay (NOAA, 2010). Outside of the navigation channel, the bay floor consists of platforms at depths that vary slightly (Merkel and Associates, Inc., 2009). Within the Central Bay, typical depths range from 10.7–11.6 m (35–38 ft) MLLW to support large ship turning and anchorage, and small vessel marinas are typically dredged to depths of 4.6 m (15 ft) MLLW (Merkel and Associates, Inc., 2009).

Figure 1. Map of the Regional Location of Naval Base Point Loma in San Diego Bay, California

Benthic substrate in San Diego Bay is largely sand (Naval Facilities Engineering Command, Southwest and Port of San Diego Bay, 2013) as tidal currents tend to keep the finer silt and clay fractions in suspension, except in harbors and elsewhere in the lee of structures where water movement is diminished. Much of the shoreline consists of riprap and manmade structures. The project site is shallow subtidal and has an eelgrass bed located less than 1-acre in size (Merkel and Associates, Inc., 2018). Over-water structures, such as the existing Marine

Group Boat Works, LLC (MGBW; see 85 FR 33129, June 1, 2020) piles and dock structures, provide substrates for the growth of algae and invertebrates off the bottom and support abundant fish populations. Eelgrass present within the project site is important habitat for invertebrates, fishes, and birds (Naval Facilities Engineering Command, Southwest and Port of San Diego Bay, 2013).

San Diego Bay is heavily used by commercial, recreational, and military vessels, with an average of 82,413 vessel movements (in or out of the Bay) per year (approximately 225 vessel transits per day), a majority of which are presumed to occur during daylight hours. This number of transits does not include recreational boaters that use San Diego Bay, estimated to number 200,000 annually (San Diego Harbor Safety Committee, 2009).

Underwater data collect by the Navy have determined an averaged median ambient noise level to be approximately 129.6 decibel pressure of 1 microPascal (dB re 1 μPa) for north San Diego Bay (NAVFAC SW, 2020). Their findings demonstrated ambient sound levels to be higher than the 120 dB re 1 μPa sound threshold for Level B harassment from non-impulsive sources. This is based on sound levels collected during the five past IHA applications submitted to NMFS (Navy 2013b, 2014, 2015, 2016, and 2017a) that determined sound levels ranged between 126 and 137 dB re 1 μPa (L_{50}; Naval Facilities Engineering Command, Southwest, 2018).

Section 2.2 of the application provides extensive additional details about the project area.

Detailed Description of Specific Activity

The purpose of this project is to deconstruct the old Fuel Pier to allow for the full use of the newly developed Fuel Pier. The Navy would remove 409 old piles using single or concurrent pile clippers, a diamond wire saw, an underwater chainsaw, and/or a vibratory hammer. While each removal method is assessed independently, multiple tools may be needed to remove each pile. However, with the exception for the possible concurrent use of two pile clippers, removals would be conducted independently as to minimize disturbance zones.

The hydraulic pile clippers (24-inch) would be placed over each pile and lowered to the mudline where they use a horizontal motion to cut the pile. While pile clippers may be used on any of the pile types (13-inch polycarbonate, 14-inch concrete, 16-inch concrete), any concurrent use of pile clippers (2 pile clippers) would only occur for the 14-inch and 16-inch concrete piles. Underwater divers may be needed for pile clipper use.

The use of a single diamond wire saw, underwater chainsaw, or vibratory hammer may be used for the 14-inch and 16-inch concrete piles. The diamond wire saw rig and vibratory hammer would be placed around the pile. The saw would cut through the pile using a worker-operated level bar. The vibratory hammer would loosen the pile from the surrounding sediment, allowing it to be pulled out vertically from the ground. Lastly, a diver-operated underwater chainsaw would be used to cut through the piles. Once the piles are clipped or cut, an on-site crane would be used to vertically remove piles. Removed piles would be placed on a barge for transport to a processing yard.

The Navy's contractor will choose the most appropriate method for each pile, as discussed in the submitted project application. Pile clippers (24-inch) would be used first, either by single use for one pile or concurrent use on two piles. If the pile clippers cannot be used successfully, the underwater chainsaw would be employed to cut concrete piles. If both of these methods are both unsuccessful, the diamond wire saw would be utilized. Lastly, the vibratory hammer would be implemented to loosen any relatively intact piles to allow for vertical removal by crane. However, the Navy has noted in their application that the contractor performing the work will choose the appropriate method of pile removal.

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

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. 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*).

There are six marine mammal species that are potentially expected to be present during all or a portion of the in-water work associated with this project in San Diego Bay, including the California sea lion (*Zalophus californianus*), the Northern elephant seal (*Mirounga angustirostris*), the harbor seal (*Phoca vitulina*), the bottlenose dolphin (*Tursiops truncatus*), the Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and the common dolphin (*Delphinus delphis*). The Committee on Taxonomy recently determined both the long-beaked and short-beaked common dolphin belong in the same species and we adopt this taxonomy, but the SARs still describe the two as separate stocks and that stock information is presented in Table 1. California sea lions are typically present year-round and are very common in the project area, but may have variable sightings based off Navy marine mammal surveys of northern San Diego Bay. Bottlenose dolphins and harbor seals are also common and likely to be present year-round, but with more variable occurrence in San Diego Bay in comparison to California sea lions. Common dolphins are known to occur in nearshore waters outside San Diego Bay, but are only rarely observed near or in the Bay. The remaining species are known to occur in nearshore waters outside San Diego Bay, but are generally only rarely observed near or in the bay. However, recent observations indicate that these species may occur in the project area and therefore could potentially be subject to incidental harassment from the aforementioned activities.

Table 1 lists all marine mammal species with expected potential for occurrence in the vicinity of Naval Base Point Loma during the project timeframe and summarizes key information, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS's SARs; *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments*). 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. For taxonomy, we followed the Society for Marine

Mammalogy's Committee on Taxonomy (2020).

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 2019 Pacific SARs (Carretta *et al.,* 2020a) and draft 2020 U.S. Pacific SARs (Carretta *et al.,* 2020b). All values presented in Table 1 are the most recent available at the time of publication and are available in the 2019 Pacific SARs and draft 2020 Pacific SARs (available online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/draft-marine-mammal-stock-assessment-reports*).

TABLE 1—SPECIES AND STOCKS THAT TEMPORALLY AND SPATIALLY CO-OCCUR WITH THE PROJECT TO A DEGREE THAT TAKE IS REASONABLY LIKELY TO OCCUR

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 Odontoceti (toothed whales, dolphins, and porpoises)						
Family Delphinidae:						
Bottlenose dolphin	*Tursiops truncatus*	California coastal	-, -, N	453 (0.06, 3436, 2011)	2.7	≥2.0
Short-beaked common dolphin.	*Delphinus delphis*	California/Oregon/Washington	-, -, N	969,861 (0.17, 839,325, 2014)	8393	≥40
Long-beaked common dolphin.	*Delphinus capensis*	California	-, -, N	101,305 (0.49, 68,432, 2014)	657	≥35.4
Pacific white-sided dolphin	*Lagenorhynchus obliquidens*	California/Oregon/Washington	-, -, N	26,814 (0.28, 21,195, 2014)	191	7.5
Order Carnivora—Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions):						
California sea lion	*Zalophus californianus*	United States	-, -, N	257,606 (N/A, 233,515, 2014)	14011	>320
Family Phocidae (earless seals):						
Harbor seal	*Phoca vitulina*	California	-, -, N	30,968 (N/A, 27,348, 2012)	1641	43
Northern elephant seal	*Mirounga angustirostris*	California breeding	-, -, N	179,000 (N/A, 81,368, 2010)	4882	8.8

[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-assessments.* CV is coefficient of variation; N_{min} 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 (M/SI) 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.

As indicated above, all six species (with seven managed stocks) in Table 1 temporally and spatially co-occur with the activity to the degree that take is reasonably likely to occur, and we have proposed authorizing it. While Risso's dolphins and gray whales have been sighted around California coastal waters in the past, these species' general spatial occurrence is such that take is not expected to occur as they typically occur more offshore, and they are not discussed further beyond the explanation provided here.

Specifically, gray whales may be observed in San Diego Bay sporadically during their January southbound migratory periods (Naval Facilities Engineering Command, Southwest and Port of San Diego Bay, 2013), and have previously been included in take authorizations for past projects and IHAs relating to Naval Base Point Loma (refer back to the Year 1–5 IHAs cited above). However, in the most recent Monitoring Report from October 8, 2017 to January 25, 2018 (Year 5 IHA; NAVFAC SW, 2018) at Naval Base Point Loma, no sightings occurred for gray whales. Only two gray whales were spotted in the October 8, 2016 to April 30, 2017 (Year 4 IHA; NAVFAC SW, 2017) Monitoring Report by the Navy.

Risso's dolphins have not been seen in San Diego Bay but are known to be common in southern California coastal waters (Campbell *et al.,* 2010). While take of Risso's dolphins have been authorized in three of the past IHAs for Naval Base Point Loma (see Year 3 IHA at 80 FR 62032, October 15, 2015; Year 4 IHA at 81 FR 66628, September 28, 2016; and Year 5 IHA at 82 FR 45811, October 2, 2017 for examples), no Risso's dolphins were sighted during any of those projects.

Furthermore, due to the relatively shallow depth near the project site the more sheltered and inland location of this project site within San Diego Bay, and the inclusion of the buffered shutdown zone within the Navy's monitoring and mitigation plan, NMFS expects that a very low probability of take exists for these two species. Because of these reasons, no take has been requested nor proposed to be authorized for gray whales or Risso's dolphins during this proposed IHA.

Furthermore, other species that occur in the Southern California Bight may have the potential for isolated occurrence within San Diego Bay or just offshore. In particular, a short-finned pilot whale (*Globicephala macrorhynchus*) was observed off Ballast Point, and a Steller sea lion (*Eumetopias jubatus monteriensis*) was seen in the project area during the Year 2 project at Naval Base Point Loma (79 FR 65378, November 4, 2014). However, these species are not typically observed near the project area and, we do not believe it likely that they will occur during this proposed action. Given the unlikelihood of their exposure to the sounds generated from the project, these species are not considered further.

Bottlenose Dolphin

As seen in the Navy's marine mammal surveys of San Diego Bay, cited above,

coastal bottlenose dolphins have occurred within San Diego Bay sporadically and in variable numbers and locations. The California coastal stock of bottlenose dolphin is distinct from the offshore population and is resident in the immediate (within 1 km of shore) coastal waters, occurring primarily between Point Conception, California, and San Quintin, Mexico. Occasionally, during warm-water incursions such as during the 1982–1983 El Niño events, their range extends as far north as San Francisco Bay (Carretta *et al.,* 2017). They are commonly found in groups of 2 to 15 individuals and in larger groups offshore.

Coastal bottlenose dolphins have occurred sporadically and in highly variable numbers and locations in San Diego Bay. Navy surveys showed that bottlenose dolphins were most commonly sighted in April, and there were more dolphins observed during El Niño years.

California coastal bottlenose dolphins show little site fidelity and likely move within their home range in response to patchy concentrations of nearshore prey (Defran *et al.,* 1999; Bearzi *et al.,* 2009). After finding concentrations of prey, animals may then forage within a more limited spatial extent to take advantage of this local accumulation until such time that prey abundance is reduced, likely then shifting location once again and possibly covering larger distances. Navy surveys frequently result in no observations of bottlenose dolphins, and sightings have ranged from 0–8 groups observed (0–40 individuals).

Pacific White-Sided Dolphin

Pacific white-sided dolphins are endemic to temperate waters of the North Pacific Ocean, and are common both on the high seas and along the continental margins (Carretta *et al.,* 2014). Off the U.S. west coast, Pacific white-sided dolphins occur primarily in shelf and slope waters. Sighting patterns from aerial and shipboard surveys conducted in California, Oregon and Washington suggest seasonal north-south movements, with animals found primarily off California during the colder water months and shifting northward into Oregon and Washington as water temperatures increase in late spring and summer (Carretta *et al.,* 2014).

Pacific white-sided dolphins are uncommon in San Diego Bay, but observations of this species increased during El Niño years. Monitoring during the Year 2 IHA documented seven sightings of Pacific white-sided dolphins, comprising 27 individuals, with a mean group size of 3.85 individuals per sighting and an average of 0.28 individuals sighted per day of monitoring.

Common Dolphins (Short-Beaked and Long-Beaked)

Short-beaked common dolphins are the most abundant cetacean off California and are widely distributed between the coast and at least 300 nautical miles (nmi; 555.6 km) offshore. In contrast, long-beaked common dolphins generally occur within 50 nmi of shore. Both stocks of common dolphin appear to shift their distributions seasonally and annually in response to oceanographic conditions and prey availability (Carretta *et al.,* 2016). Long-beaked common dolphins appear to prefer shallower, warmer waters as compared to the short-beaked common dolphin (Perrin 2009). Both tend to be more abundant in coastal waters during warm-water months (Bearzi, 2005).

The occurrence of common dolphins inside San Diego Bay is uncommon (NAVFAC SW and POSD, 2013). However, common dolphins were observed within the bay on three occasions (twelve, five, and two individuals) on two separate days during monitoring conducted during the Indicator Pile Program in Fall 2014 (78 FR 44539, July 24, 2013). Within San Diego Bay, these two stocks' share overlapping distributions, although they are likely long-beaked (as described by the stranding of this species from San Diego Bay to the U.S.-Mexico border (Danil and St. Leger, 2011)). Furthermore, it is unlikely that observers would be able to differentiate the specific species in the field.

California Sea Lion

The California sea lion is by far the most commonly-sighted pinniped species in the vicinity of Naval Base Point Loma and northern San Diego Bay. California sea lions regularly occur on rocks, buoys and other structures, and especially on bait barges, although numbers vary greatly.

Different age classes of California sea lions are found in the San Diego region throughout the year (Lowry *et al.,* 1992), although Navy surveys show that the local population comprises adult females and sub-adult males and females, with adult males being uncommon. The Navy has conducted marine mammal surveys throughout the north San Diego Bay project area (Merkel and Associates, 2008; Johnson, 2010, 2011; Lerma, 2012, 2014). Sightings include all animals observed and their locations. The majority of observations are of animals hauled out.

There are a few man-made areas near the proposed project site where California sea lions are known to haul out. The Navy has noted that the most proximal location is two sets of Navy-owned docks that are 140 m (459 ft) to the southwest and 180 m (591 ft) to the north. However, these docks are used constantly for other Navy activities and California sea lions are not expected to remain present for long periods of time. The Everingham Brother Bait Barges, located approximately 400 to 500 m (1,312 to 1,640 ft) southeast of the proposed project area, also serves as a known haul out site. No natural haul outs are known near the project site.

Per NMFS's 2019 Pacific SAR, it is estimated that the carrying capacity for California sea lions is around 275,298 animals in 2014 (Laake *et al.,* 2018; Carretta *et al.,* 2020a). As indicated by the current draft 2020 Pacific SAR, this estimate has not changed (Carretta *et al.,* 2020b).

Harbor Seal

Harbor seals are considered abundant throughout most of their range from Baja California to the eastern Aleutian Islands. Peak numbers of harbor seals haul-out on land during late May to early June, which coincides with the peak of their molt. Harbor seals do not make extensive pelagic migrations, but do travel hundreds of km on occasion to find food or suitable breeding areas (Carretta *et al.,* 2016). Based on likely foraging strategies, Grigg *et al.,* (2009) reported seasonal shifts in harbor seal movements based on prey availability. In relationship to the entire California stock, harbor seals do not have a significant mainland California distribution south of Point Mugu.

Harbor seals are relatively uncommon within San Diego Bay. Sightings in the Navy transect surveys of northern San Diego Bay through March 2012 were limited to the south side of Ballast Point (TDI, 2012; Jenkins, 2012). However, Navy marine mammal monitoring for another project conducted intermittently at Pier 122 (located approximately 6,150 m (20,177.17 ft) northeast from the location of this proposed project) from 2010–2014 documented from zero to 4 harbor seals within the proposed project area at various times, with the greatest number of sightings during April and May (Jenkins, 2012; Bowman, 2014). Subsequently, monitoring conducted by the Navy during Year 1 of the fuel pier project documented increased numbers of harbor seals in the project area (Lerma, 2014). Approximately three-

quarters of these observations were of animals hauled out along the Naval Base Point Loma shoreline. An individual harbor seal was also frequently sighted near Naval Mine and Anti-Submarine Warfare Command (NMAWC), located approximately 3,700 m (12,139.11 ft) north of the project site, during 2014 (McConchie, 2014).

Northern Elephant Seal

The population is estimated to have grown at 3.8 percent annually since 1988 (Lowry *et al.,* 2014). Northern elephant seals breed and give birth in California (U.S.) and Baja California (Mexico), primarily on offshore islands. Populations of northern elephant seals in the U.S. and Mexico have recovered after being reduced to near extinction by hunting, undergoing a severe population bottleneck and loss of genetic diversity with the population reduced to only an estimated 10–30 individuals.

Northern elephant seals occur in the southern California bight, and have the potential to occur in San Diego Bay (NAVFAC SW and POSD 2013), but the only recent documentation of occurrence was of a single distressed juvenile observed on the beach south and inshore of the Fuel Pier during the second year IHA. Given the continuing, long-term increase in the population of northern elephant seals (Lowry *et al.,* 2014), there is an increasing possibility of occurrence in the project area.

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 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 2.

TABLE 2—MARINE MAMMAL REARING GROUPS (NMFS, 2018)

Hearing group	Generalized hearing range [1]
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.

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

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

For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information. Six marine mammal species (three cetaceans and three pinnipeds (one otariid (California sea lion) and two phocid (harbor seal and Northern elephant seal) species have the reasonable potential to co-occur with the proposed construction activities (Table 1). Of the cetacean species that may be present at Naval Base Point Loma during this proposed project, none are classified as low-frequency cetaceans, three are classified as mid-frequency cetaceans (Pacific white-sided dolphins, bottlenose dolphins, and common dolphins), and none are classified as high-frequency cetaceans.

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, Monitoring, and Reporting Measures 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 vibratory pile removal, the use of underwater chainsaws, pile clippers (individual and concurrently), and diamond wire saws. The effects of underwater noise from the Navy's proposed activities have the potential to result in Level A or Level B harassment of marine mammals in the action area. However, Level A harassment is not expected nor would be authorized for this project.

Description of Sound Sources

The marine soundscape is comprised of both ambient and anthropogenic sounds. Ambient sound is defined as the all-encompassing sound in a given place and is usually a composite of sound from many sources both near and far (ANSI, 1995). 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 this project would include vibratory pile removal as well as diamond wire saw, underwater chainsaws, and single-use or concurrent-use of pile clippers. The sounds produced by these activities fall into one of two general sound types: Impulsive and non-impulsive. Impulsive sounds (*e.g.,* explosions, gunshots, sonic booms, impact pile driving) are typically transient, brief (less than 1 second), broadband, and consist of high peak sound pressure with rapid rise time and rapid decay (ANSI, 1986; NIOSH, 1998; ANSI, 2005; NMFS, 2018). Non-impulsive sounds (*e.g.,* machinery operations such as drilling or dredging, vibratory pile driving, chainsaws, pile clippers, and active sonar systems) can be broadband, narrowband or tonal, brief or prolonged (continuous or intermittent), and typically do not have the high peak sound pressure with raid rise/decay time that impulsive sounds do (ANSI, 1995; NIOSH, 1998; NMFS, 2018). The distinction between these two sound types is important because they have differing potential to cause physical effects, particularly with regard to hearing (*e.g.,* Ward, 1997 in Southall *et al.,* 2007).

Vibratory hammers would be used in this project. Vibratory hammers install or remove 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).

Pile clippers, diamond wire saws, and underwater chainsaws are hydraulically operated equipment. A pile clipper is a large, heavy elongated horizontal guillotine-like structure that is mechanically lowered over a pile down to the mudline or substrate where hydraulic force is used to push a sharp blade to cut a pile. The underwater chainsaws are operated by SCUBA divers. The diamond wire saw may need to be operated by a SCUBA diver as well. Sounds generated by this demolition equipment are non-impulsive and continuous (NAVAC SW, 2020).

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

Acoustic Impacts

The introduction of anthropogenic noise into the aquatic environment from pile removal and the various demolition equipment is the primary means by which marine mammals may be harassed from the Navy'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). Generally, exposure to pile removal and other construction 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 removal and demolition noise on marine mammals are dependent on several factors, including, but not limited to, sound type (*e.g.,* impulsive vs. non-impulsive), the species, age and sex class (*e.g.,* adult male vs. mom with calf), duration of exposure, the distance between the pile and the animal, received levels, behavior at time of exposure, and previous history with exposure (Wartzok *et al.,* 2004; Southall *et al.,* 2007). Here we discuss physical auditory effects (threshold shifts) followed by behavioral effects and potential impacts on habitat.

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

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, and 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 (NMFS, 2018).

Temporary Threshold Shift (TTS)

A temporary, reversible increase in the threshold of audibility at a specified frequency or portion of an individual's hearing range above a previously established reference level (NMFS, 2018). Based on data from cetacean TTS measurements (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 (2016), marine mammal studies have shown the amount of TTS increases with cumulative sound exposure level (SEL_{cum}) in an accelerating fashion: At low exposures with lower SEL_{cum}, the amount of TTS is typically small and the growth curves have shallow slopes. At exposures with higher SEL_{cum}, the growth curves become steeper and approach linear relationships with the noise SEL.

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

Currently, TTS data only exist for four species of cetaceans (bottlenose dolphin, beluga whale (*Delphinapterus leucas*), harbor porpoise (*Phocoena phocoena*), 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). The potential for TTS from impact pile driving exists. After exposure to playbacks of impact pile driving sounds (rate 2,760 strikes/hour) in captivity, mean TTS increased from 0 dB after 15 minute exposure to 5 dB after 360 minute exposure; recovery occurred within 60 minutes (Kastelein *et al.,* 2016). 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).

During pile removal activities there would likely be pauses in the activities producing sound during each day. Given these pauses and that many marine mammals are likely moving through the action area and not remaining for extended periods of time, the potential for TS declines.

Behavioral Harassment

Exposure to noise from pile 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.,* 2004; 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.

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). 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, when available, may be used to better inform assessment of whether foraging disruptions are likely to have fitness consequences.

In 2016, the Alaska Department of Transportation and Public Facilities (ADOT&PF) documented observations of marine mammals during construction activities (*i.e.,* pile driving) at the Kodiak Ferry Dock (ABR, 2016; see 80 FR 60636, October 7, 2015). In the marine mammal monitoring report for that project (ABR, 2016), 1,281 Steller sea lions were observed within the Level B harassment disturbance zone during pile driving or drilling (*i.e.,* documented as Level B harassment

take). Of these, 19 individuals demonstrated an alert behavior, 7 were fleeing, and 19 swam away from the project site. All other animals (98 percent) were engaged in activities such as milling, foraging, or fighting and did not change their behavior. In addition, two sea lions approached within 20 m of active vibratory pile driving activities. Three harbor seals were observed within the disturbance zone during pile driving activities; none of them displayed disturbance behaviors. Fifteen killer whales (*Orcinus orca*) and three harbor porpoise were also observed within the Level B harassment zone during pile driving. The killer whales were travelling or milling while all harbor porpoises were travelling. No signs of disturbance were noted for either of these species. Given the similarities in activities and habitat, we expect similar behavioral responses of marine mammals to the Navy's specified activity. That is, disturbance, if any, is likely to be temporary and localized (*e.g.,* small area movements).

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 would 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 (*Eubalaena glacialis*). These and other studies lead to a reasonable expectation that some marine mammals would 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. The San Diego area contains active military and commercial shipping, cruise ship and ferry operations, as well as numerous recreational and other commercial vessel and background sound levels in the area are already elevated as described in Dahl and Dall'Osta (2019).

Potential Effects of Diamond Wire Saw, Underwater Chainsaw, and Single or Concurrent Use of Pile Clipper Sounds

Diamond wire saws, underwater chainsaws, and pile clippers may be used to assist with removal of piles. The sounds produced by these activities are of similar frequencies to the sounds produced by vessels (NAVFAC SW, 2020), and are anticipated to diminish to background noise levels (or be masked by background noise levels) in the Bay relatively close to the project site. Therefore, the effects of this equipment are likely to be similar to those discussed above in the Behavioral Harassment section.

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

Airborne noise would primarily be an issue for pinnipeds that are swimming or hauled out near the project site within the range of noise levels elevated above the acoustic criteria. We recognize that pinnipeds in the water could be exposed to airborne sound that may result in behavioral harassment when looking with their heads above water. Most likely, airborne sound would cause behavioral responses similar to those discussed above in

relation to underwater sound. For instance, anthropogenic sound could cause hauled-out pinnipeds to exhibit changes in their normal behavior, such as reduction in vocalizations, or cause them to temporarily abandon the area and move further from the source. However, these animals would previously have been 'taken' because of exposure to underwater sound above the behavioral harassment thresholds, which are in all cases larger than those associated with airborne sound. Thus, the behavioral harassment of these animals is already accounted for in these estimates of potential take. Therefore, we do not believe that authorization of incidental take resulting from airborne sound for pinnipeds is warranted, and airborne sound is not discussed further here.

Potential Effects on Marine Mammal Habitat

The Navy's construction activities could have localized, temporary impacts on marine mammal habitat and their prey by increasing in-water sound pressure levels and slightly decreasing water quality. 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 vibratory pile removal or pile cutting, elevated levels of underwater noise would ensonify San Diego Bay where both fishes 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. Construction activities are of short duration and would likely have temporary impacts on marine mammal habitat through increases in underwater and airborne sound.

A temporary and localized increase in turbidity near the seafloor would occur in the immediate area surrounding the area where piles are removed. In general, turbidity associated with pile installation is localized to about a 25-foot (7.6-meter) radius around the pile (Everitt *et al.,* 1980). The sediments of the project site are sandy and would settle out rapidly when disturbed. Cetaceans are not expected to be close enough to the pile removal 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.

The area likely impacted by the project is relatively small compared to the available habitat (*e.g.,* the impacted area is in the Bay mouth only) of San Diego Bay and does not include any Biologically Important Areas or other habitat of known importance. The area is highly influenced by anthropogenic activities. The total seafloor area affected by pile removal is a very small area compared to the vast foraging area available to marine mammals in the San Diego Bay. At best, the impact area provides marginal foraging habitat for marine mammals and fish. Furthermore, pile removal 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 removal 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 due to temporary species displacement.

In-Water Construction 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). 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, multi-year 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; Cott *et al.,* 2012).

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).

Because of the rarity of use and research, the effects of pile clippers, diamond wire saws, underwater chainsaws, and water jetting are not fully known; but given their similarity to ship noises we do not expect unique effects from these activities.

The most likely impact to fish from pile removal activities at the project area would be temporary behavioral avoidance of the area. 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.

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 feet (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 San Diego Bay 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 removal events and the relatively small areas being affected, pile removal 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 would inform both NMFS' consideration of ''small numbers'' and the negligible impact determination.

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 be by Level B harassment only, in the form of disruption of behavioral patterns and TTS for individual marine mammals resulting from exposure to the sounds produced from the underwater acoustic sources (*i.e.,* vibratory hammer, single use or concurrent use of pile clippers, underwater chainsaw, diamond wire saw). Based on the nature of the activity and the anticipated effectiveness of the mitigation measures (*i.e.,* PSO monitoring and shutdown zone) discussed in detail below in the Proposed Mitigation, Monitoring, and Reporting Measures section, Level A harassment is neither anticipated nor proposed to be authorized.

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 would be behaviorally harassed or incur some degree of permanent hearing impairment; (2) the area or volume of water that would 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).

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 μPa (root mean square (rms)) for continuous (*e.g.,* vibratory hammer) and above 160 dB re 1 μPa (rms) for non-explosive impulsive (*e.g.,* impact hammers (pile-driving)) or intermittent (*e.g.,* scientific sonar) sources.

The Navy's pile removal activities includes the use of stationary, non-impulsive, and continuous noise sources (vibratory hammer, diamond wire saw, underwater chainsaw, single use or concurrent use of pile clippers), and therefore the 120 dB re 1 μPa (rms) is applicable. However, as discussed above, the Navy measurements support an ambient noise estimate of 129.6 dB re 1 μPa (rms) in the project area. Accordingly, we have adjusted the standard Level B harassment threshold of 120 dB to 129.6 dB, as it likely provides a more realistic and accurate basis for predicting Level B harassment in the San Diego Bay area.

Level A harassment for non-explosive sources—NMFS' Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0) (NMFS, 2018a) identifies dual criteria to assess auditory injury (Level A harassment) to five different marine mammal groups (based on hearing sensitivity) as a result of exposure to noise from two different types of sources (impulsive or non-impulsive). The Navy's pile removal activities includes the use of non-impulsive (vibratory pile removal and other cutting and removal methods) sources.

These thresholds are provided in Table 3 below. The references, analysis, and methodology used in the development of the thresholds are described in NMFS 2018a Technical Guidance, which may be accessed at *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance.*

TABLE 3—THRESHOLDS IDENTIFYING THE ONSET OF PERMANENT THRESHOLD SHIFT (PTS)

Hearing group	PTS onset acoustic thresholds [1] (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.

[1] 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 1 μPa2s. 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 would be exceeded.

Ensonified Area

Here, we describe operational and environmental parameters of the activity that would feed into identifying the area ensonified above the acoustic thresholds, which include source levels, durations, 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.,* vibratory pile removal, diamond wire saw, single use or concurrent use of pile clippers, and underwater chainsaws).

Vibratory hammers produce constant sound when operating, and produce vibrations that liquefy the sediment surrounding the pile, allowing it to penetrate to the required seating depth or be withdrawn more easily. The actual durations of each method vary depending on the type and size of the pile.

In order to calculate the distance to the Level B harassment sound threshold for piles of various sizes being used in this project, the Navy used acoustic monitoring data from other locations and projects to develop source levels for the various pile types, sizes, and methods of removal. Data for the removal methods (*i.e.,* a diamond wire saw, individual use or concurrent use of pile clippers, and an underwater chainsaw) comes from data gathered at other nearby or related Navy projects as reported in their San Diego Noise Compendium (NAVFAC SW, 2020). The only exception to this would be the sound source data for the vibratory hammer, which was sourced from the City of Seattle Pier 62 project (Greenbusch Group, 2018). The source levels for the pile clippers, single and simultaneous use, and underwater chainsaw for this project utilized the mean maximum RMS SPL rather than the median sound levels we typically use as this would provide a more conservative measure. The diamond wire saw utilized the noise profile measurements associated with the removal of 66-inch and 84-inch caissons in the Navy Compendium (NAVFAC SW, 2020).). The Navy has noted, and we agree, that these values are likely much lower in reality as this proposed project would remove 16-inch concrete piles instead of the much larger varients modeled in the Compendium. However, no recorded data currently exists for the wire saws cutting concrete; therefore, we used the mean of the source level data from the Navy Compendium. The vibratory hammer used the highest average weighted RMS sound level per the Seattle Pier 62 project acoustic monitoring report (Greenbusch Group, 2018).

During pile removal activities, there may be times when two pile extraction methods (*i.e.,* pile clippers) are used simultaneously. The likelihood of such an occurrence is anticipated to be infrequent, would depend on the specific methods chosen by the contractor, and would be for short durations on that day. In-water pile removal occurs intermittently, and it is common for removal to start and stop multiple times as each pile is adjusted and its progress is measured. Moreover, the Navy has multiple options for pile removal depending on the pile type and condition, sediment, and how stuck the pile is, etc. When two continuous noise sources, such as pile clippers, have overlapping sound fields, there is potential for higher sound levels than for non-overlapping sources. When two or more pile removal methods (pile clippers) are used simultaneously, and the sound field of one source encompasses the sound field of another source, the sources are considered additive and combined using the following rules (see Table 4). For addition of two simultaneous methods, the difference between the two sound source levels (SSLs) is calculated, and if that difference is between 0 and 1 dB, 3 dB are added to the higher SSL; if difference is between 2 or 3 dB, 2 dB are added to the highest SSL; if the difference is between 4 to 9 dB, 1 dB is added to the highest SSL; and with differences of 10 or more dB, there is no addition (NMFS, 2018b; WSDOT, 2018).

TABLE 4—RULES FOR COMBINING SOUND LEVELS GENERATED DURING PILE REMOVAL

Difference in SSL	Level A harassment isopleths	Level B harassment isopleths
0 or 1 dB	Add 3 dB to the higher source level	Add 3 dB to the higher source level.
2 or 3 dB	Add 2 dB to the higher source level	Add 2 dB to the higher source level.
4 to 9 dB	Add 1 dB to the higher source level	Add 1 dB to the higher source level.

TABLE 4—RULES FOR COMBINING SOUND LEVELS GENERATED DURING PILE REMOVAL—Continued

Difference in SSL	Level A harassment isopleths	Level B harassment isopleths
10 dB or more	Add 0 dB to the higher source level	Add 0 dB to the higher source level.

Source: Modified from USDOT, 1995; WSDOT, 2018; and NMFS, 2018b.
Note: dB = decibel; SSL = sound source Level

Level A Harassment Zones

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 the localized pile removal activities discussed above, the 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.

The Navy provided estimates to NMFS for the duration of sound exposure for each pile removal activity. The durations used in this proposed project for each pile removal method were noted as ''conservative estimates that are greater than durations observed in the San Diego Noise Compendium'' by the Navy. In discussions with NMFS, the Navy has explained that the average durations found in the IHA application and Compendium were based around data collected in the from the old Fuel Pier demolition projects (NAVFAC SW 2014, 2015a, 2016, 2017a, 2017b, 2018a, and 2018b). These values were adjusted to account for either the maximum amount of time the activity could occur (*i.e.,* pile clippers), a duration that is greater than the maximum (*i.e.,* underwater chainsaw and vibratory hammer), or an adjusted duration based on the removal of a smaller pile (*i.e.,* diamond wire saw) in order to provide somewhat more conservative measurements using real-world data. These values were likely considered more realistic for past projects and could safely be assumed as conservative for this proposed project as the Navy will be cutting smaller sized piles. The Navy also performed an ''ultra-conservative'' hypothetical review by modeling a 1-hour duration for each pile being removed. Using a rate of five piles removed per day, the resulting Level A harassment isopleths were still smaller than the 20 m shutdown zone the Navy plans to implement. Further information on durations can be found in the Compendium (NAVFAC SW, 2020).

All inputs used in the User Spreadsheet are reported below in Table 5.

TABLE 5—PROJECT SOUND SOURCE LEVELS AND USER SPREADSHEET INPUTS

Activity [3]	Type of source	Source level (dB RMS) [1]	Duration of sound production (hours) [2]	Transmission loss coefficient
Vibratory pile driving	Stationary source, non-impulsive, continuous	152	0.1667	15
13-inch polycarbonate pile removal	Stationary source, non-impulsive, continuous	154	0.42	11.7
16-inch concrete pile removal	Stationary source, non-impulsive, continuous	147	0.42	15
16-inch concrete pile clipping with +3dB adjustment for two simultaneous pile clippers.	Stationary source, non-impulsive, continuous	150	0.42	15
16-inch concrete pile removal using hydraulic chainsaw (underwater chainsaw).	Stationary source, non-impulsive, continuous	150	0.83	15
Wire saw for caisson cutting	Stationary source, non-impulsive, continuous	156	1.7	15

[1] All of these sound source data for use in the Level A and B harassment threshold modeling were calculated from acoustic data found in the 2020 San Diego Noise Compendium (NAVFAC SW, 2020); the only exception is the vibratory hammer source level which was sourced from the City of Seattle Pier 62 Project (Greenbusch Group, 2018).
[2] The User Spreadsheet inputs assumed 5 piles would be removed within a single 24-hour period using data from the Navy's Compendium (NAVFAC SW, 2020).
[3] All activities utilized a weighting factor adjustment (kHz) of 2.5.

For this project, we modeled sound propagation using the practical spreading value of 15 for transmission loss for all pile removal methods, except for the removal of the 13-inch polycarbonate piles. For this, 11.7 was used as the transmission loss coefficient as this value was a calculated measure from recorded data that was fit with a logarithmic trendline during the clipping of a 13-inch round concrete pile using small pile clippers in February 2017 at the old Fuel Pier (NAVFAC SW, 2020). The above input scenarios lead to PTS isopleth distances (Level A harassment thresholds) of less than 1 meter for all methods and piles (Table 6).

TABLE 6—MODELED AND EXPECTED LEVEL A AND B HARASSMENT ISOPLETHS (USING TWO METHODS) FOR THE PILE TYPE AND REMOVAL METHOD (METERS)

Pile information	Removal method	(A) Projected distances to level A harassment isopleth [3]			(B) Projected distances to level B harassment isopleth [5]	
		MF	PW	OW	Practical spreading loss model	Real-time data
13-inch polycarbonate pile	One pile clipper	0.0	0.0	0.0	[5] 423	350
14-inch, 16-inch concrete piles.	One pile clipper	0.0	0.0	0.0	145	[5] 250
14-inch, 16-inch concrete pile [1].	Two pile clippers	0.0	0.0	0.0	229	[5] 250
14-inch, 16-inch concrete pile.	Underwater chainsaw	0.0	0.1	0.0	[5] 229	45
14-inch, 16-inch concrete pile.	Diamond wire saw	0.1	0.7	0.0	[5] 575	350
14-inch, 16-inch concrete pile.	Vibratory hammer	0.1	0.9	0.1	[5] 311	([4])

MF = mid-frequency cetaceans, PW = phocid pinnipeds, OW = otariid pinnipeds.

[1] The Navy added an adjustment of +3 dB to the noise of a single pile clipper (147 dB RMS re 1μPa) and increased to 150 dB RMS re 1μPa where two clippers are used simultaneously (Kinsler et al., 2000). This adjustment is consistent with NMFS guidance for simultaneous sound sources.

[2] All sound sources were taken from the Compendium of Underwater and Airborne Sound Data during Pile Installation and In-Water Demolition Activities in San Diego Bay, California (San Diego Noise Compendium; NAVFAC SW, 2020), with exception of the vibratory hammer which was sourced from the City of Seattle Pier 62 Project (Greenbusch Group, 2018).

[3] Because of the small sizes of the Level A harassment isopleths (as determined by NMFS's User Spreadsheet Tool) and the mitigation methods implemented during this project, neither NMFS nor the Navy expects Level A harassment (and, therefore, take) to occur.

[4] No information available.

[5] Designate the most conservative isopleths NMFS will use for the subsequent Level B take analyses and Level B harassment impact zones.

Level B Harassment Zones

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

$$TL = B * \text{Log10}(R1/R2),$$

where:

TL = transmission loss in dB

B = transmission loss coefficient; for practical spreading equals 15

R1 = the distance of the modeled SPL from the driven pile, and

R2 = the distance from the driven pile of the initial measurement

The recommended TL coefficient for most nearshore environments is the practical spreading value of 15. This value results in an expected propagation environment that would lie between spherical and cylindrical spreading loss conditions, which is the most appropriate assumption for the Navy's proposed activity in the absence of specific modeling. We used the Navy's realistic, site-specific averaged median ambient noise measurement of 129.6 dB RMS re 1 μPa for the Level B harassment threshold in San Diego Bay (NAVFAC SW, 2020). It should be noted that based on the bathymetry and geography of San Diego Bay, sound would not reach the full distance of the Level B harassment isopleths in all directions.

To determine the most appropriate and conservative Level B harassment isopleths, we compared two methods and selected the isopleth between each method that was largest, thus providing the greatest coverage for the Level B harassment zone. Level B harassment isopleths were considered appropriate based on the distance where the source level reached the 129.6 dB ambient value. The two methods compared the empirical data provided in the Navy's Compendium for work at Naval Base Point Loma (NAVFAC SW, 2020) with the Practical Spreading Loss model using a transmission loss coefficient of 15, as described above. Results of each method are shown in Table 6 and described below.

For the Compendium method, the average and maximum sound levels (in dB re 1 μPa) measured at the source (10 m) and then at various far-field distances typically showed a monotonic decline in average and maximum sound pressure levels asas distance increased. The Navy chose to use the average values for two main reasons: (1) Consistency with using the average median (L50) ambient values; and (2) average source values were used for the same activities in the Pier 6 project nearby (86 FR 7993, February 3, 2021). However, some level of variability in the recorded sound pressure levels was present where noise levels would drop to ambient levels and then increase to higher levels at greater distances. An example of this would be measurements for the 84-inch caisson removal by a single wire saw. At source (10 m), the average and maximum source levels exceeded the ambient noise levels for both measurements at the source (136.1 and 141.4 dB re 1 μPa; 140.9 and 146.5 dB re 1 μPa, respectively). At far-field distances (>20 m), the averages show variability with a gradual decline and then a subsequent increase, *i.e.,* 140.8 dB re 1 μPa at 20 m and 134.8 at 40 m, then 137.1 dB re 1 μPa at 60 m. The distance where sound was measured ends at 283 m from the source with an average level of 130.3 dB re 1 μPa and a maximum level of 137.0 dB re 1 μPa, both in exceedance of the ambient level. These instances could be attributed to the presence of vessel traffic at distance from the acoustic recorder, causing some interference or competing background noise to the pure sound measurements of the wire saw or to random variation from other acoustic effects related to the specific location of the hydrophone. In any event, the distance at which the sound declined below ambient was not always entirely clear and the Navy was unable to develop a consistent criterion to determine the likely distance at which sound decreased below ambient or to account for factors like the topography or hydrophone location. Therefore we describe the analysis of the Navy

Compendium's field data for each pile removal method individually below.

For the 13-inch polycarbonate piles with pile clippers the Navy believes that at between 300 and 400 m (984 to 1,312 ft), a majority of the background noise measured is directly related to traffic transiting to/from the Everingham Brothers Bait Company (EBBCO) bait barges which are to the southwest of the project area. Boat traffic for that specific route ranges from small boats to large recreational/commercial fishing vessels and traffic is nearly constant throughout the day. Because of that, the Navy believes values between those distances would likely be artificially high relative to the transmission loss associated with the project-related activities. Furthermore, with the turning basin (see Figure 2), the slope rises up from a max depth of 20.12 m (66 ft) to 11.58 m (38 ft) between 200 to 400 m (656.17 to 1,312.34 ft). As is evidenced by the Navy's acoustical model for south-central San Diego Bay (see the Naval Base Point Loma Pier 6 project at *https://www.fisheries.noaa.gov/action/incidental-take-authorization-naval-base-san-diego-pier-6-replacement-project-san-diego*), changes in bathymetry (*i.e.,* channel walls) act as noise attenuators. Therefore, the Navy estimated the Level B harassment isopleth for this source at 350 m, smaller than the Practical Spreading Loss model prediction of 423 m. Given the uncertainty discussed above, we used the 423 m distance for the Level B harassment isopleth.

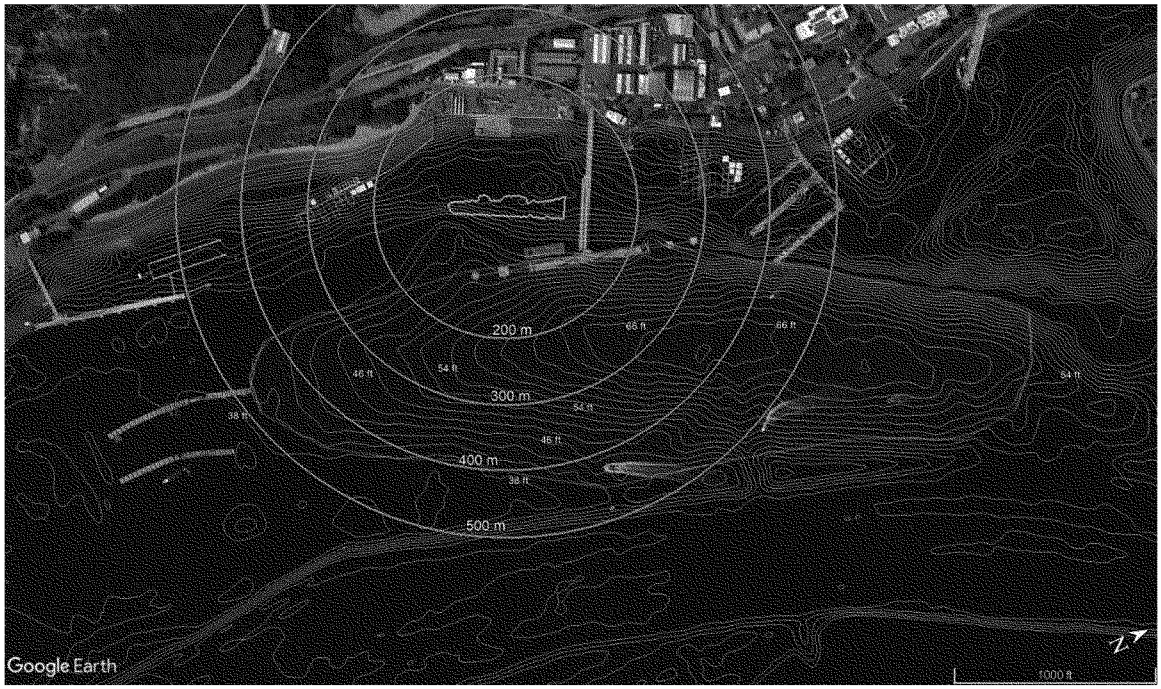

Figure 2. Map of the Turning Basin near Naval Base Point Loma in San Diego Bay, California

For the one pile clipper on concrete pile source, the Navy again believes the Compendium data were influenced by boat activity and topography of the channel. In this particular case, Table 39 of the Compendium shows that the average dB level at 215 m was 129.0 dB RMS. However, the two measurements at 309 m were split, one higher and one lower than the value at 215 m. The Navy decided that ''Understanding that acoustics is not an ''exact science,'' we evaluated the data and chose a distance (250 m) that fit the data (average noise levels dropped below 129.6 dB at between 215 and 309 m).'' As this 250 m distance exceeded the practical spreading loss model distance of 145 m, we chose the 250 m distance for the Level B harassment isopleth.

For the two pile clipper on concrete pile source the Navy decided that ''Because the project footprint is parallel to the shoreline, we created a monitoring zone that used a source level of 150 dB, but at two points at the extreme north and south of the project footprint (see Fig 6–3 in the IHA application) because we felt that this would generate a more conservative'' zone that led to an estimate of the Level B harassment isopleth of 250 m. As this 250 m distance exceeded the practical spreading loss model distance of 229 m, we chose the 250 m distance for the Level B harassment isopleth.

For the underwater chainsaw the Navy noted the ''transmission loss (27logR) was steep when compared to other equipment, but the source value was in line with the pile clippers. Because of the very steep TL value, we looked at the perceived far-field data points for the clipper activities and chose a distance that was in-between the drop off to ambient for the chainsaw (from 26 to 45 m) and the clippers (250 m).'' The Navy estimated the Level B harassment isopleth for this source at 45 m, smaller than the Practical Spreading Loss model prediction of 229 m. Given the uncertainty discussed above, we used the 229 m distance for the Level B harassment isopleth.

For the diamond wire saw the Navy again believes the Compendium data were influenced by boat activity and topography of the channel. The available data are from caissons which consist of 1.5 inch thick hardened steel

shells filled with concrete, and with wooden piles in the center of the concrete. For lack of information on wire saws, the Navy evaluated the likely far-field values for the potential zones based on the 84-inch caissons (Table 34 in the Compendium), which had more data at multiple distances. The Navy ''felt that this was a valid approach based on the similarity of the average noise data at 40 m (132.5 dB for 66-inch caisson, 134.8 for the 84-inch caisson). Per Table 34, using the average dB values at distance, the data shows a drop below 129.6 dB RMS at 200 m, but a rise again at 283 m. If you plot the regression curve based on the average 84-inch data, we cross the ambient threshold at app[roximately] 350 m . . . Because the data at far-field distances was variable, we chose a monitoring zone (350 m) that was based on the available real-time data. . . . Our assumption is that, if a wire saw were to be used on the concrete piles, the noise levels would be lower than either the 66- or 84-inch caisson.'' The Navy estimated the Level B harassment isopleth for this source at 350 m, smaller than the Practical Spreading Loss model prediction of 575 m. Given the uncertainty discussed above, we used the 575 m distance for the Level B harassment isopleth.

Marine Mammal Occurrence, Take Calculation, and Take Estimation

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

We examined two approaches towards estimating the Level B take for the requested six marine mammal species within the project area at Naval Base Point Loma. The first approach was using our standard approach of using species density multiplied by isopleth size. The second approach utilized daily sightings from monitoring reports produced from past Navy projects at Naval Base Point Loma (NAVFAC SW, 2015a; NACFAC SW, 2017; NAVFAC SW, 2018).

Density estimates for any specific area assumes that the species' in question are evenly distributed across the entire site, which is rarely the case. Using the first approach for this project, we examined the use of densities, using an overall density for San Diego Bay, within a much smaller and definitive area (specifically Naval Base Point Loma). This approach, in combination with the predicted Level B harassment isopleths, yielded take estimates that were determined to not be conservative enough in nature for these proposed activities and activity source levels as compared to the results of the in situ measurements included in the Navy's Compendium (NAVFAC SW, 2020) and as discussed above. Furthermore, the take estimates produced from this method did not appropriately account for group size of all marine mammal species as the density estimate was for a much larger area (consisting of a primarily offshore environment) and assumed a much larger spread of marine mammals. Therefore, this approach was not utilized and will not be discussed further.

The second approach utilized average daily sightings from the Year 1–5 monitoring reports from IHAs that were previously issued (NAVFAC SW, 2015a; NACFAC SW, 2017; NAVFAC SW, 2018). This information was provided by the Navy in Table 7.

TABLE 7—MONITORING RESULTS FROM THE NAVY'S YEARS 1–5 PROJECTS AT NAVAL BASE POINT LOMA IN SAN DIEGO, CALIFORNIA

Species	Year 1 project (10 days; potential El Nino year)			Year 2 project (100 days; El Nino year)			Year 3 project (59 days)			Year 4 project (152 days)			Year 5 project (49 days)		
	Total	Average/day	Average group size	Total	Average/day	Average group size	Total	Average/day	Average group size	Total	Average/day	Average group size	Total	Average/day	Average group size
California sea lions	2,229	229.9	2.2	7,507	75.1	1.4	483	8.2	1.3	2,263	*14.9	1.7	618	12.6	1.3
Harbor seal	25	2.5	1.1	248	2.5	1.0	25	0.4	1.0	88	*0.6	1.1	28	0.6	1.0
Bottlenose dolphins	83	8.3	2.4	695	7.0	2.8	25	0.4	1.9	67	*0.4	2.7	13	0.3	2.2
Common dolphins	19	19	6.3	850	*8.5	[2] 42.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pacific white-sided dolphins	n/a	n/a	n/a	27	*0.3	3.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Northern elephant seals	n/a	n/a	n/a	([1])	([1])	([1])	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

* These estimates were chosen for the second method in which to estimate take of marine mammals for this proposed action.
[1] Same individuals was observed hauled out on a beach twice.
[2] This includes four sightings of groups of 100+ animals outside of San Diego Bay. When these observations are eliminated, the average group size is 6.75 animals observed inside of San Diego Bay.

The Year 1 and 2 monitoring reports demonstrated marine mammal estimates during a potential and known El Niño year, respectively. Because of this, these values were likely not representative of the typical conditions around Naval Base Point Loma and were not preferred.

California sea lions, harbor seals, and bottlenose dolphins were recorded during all other years. Within these, Year 4 was considered the most conservative as these activities consisted of the longest duration (152 days) with the highest number of sightings for these species. So for these species we used the Year 4 average daily values.

Pacific white-sided dolphins were only recorded during Year 2. While these estimates are likely not fully representative of the typical distributions of Pacific white-sided dolphins around San Diego Bay, they will serve as the basis for our conservative take estimates for this species. Common dolphins were observed in Years 1 and 2; however, the length of the project period in Year 2 (100 days) was considered more representative than the Year 1 project (10 days). Therefore, the values from the Year 2 estimates were used for common dolphins. A single Northern elephant seal was only recorded to have hauled out on a beach twice during all Year 1–5 work. Due to this, no average daily estimates were present for analysis; however, some discretionary take is proposed to be authorized in the event Northern elephant seals are present during this proposed action.

For all species (excluding Northern elephant seals), these daily sightings were extrapolated over the number of days of pile removal activities (84).

This second approach yielded larger and more conservative Level B take estimates, but more realistic for particular species occurrence and group size given the data was previously collected at the location of this proposed project for similar or the same species during past projects. Here we describe how the information provided

above is brought together to produce a quantitative take estimate.

By following this daily occurrence-based approach using past sightings at Naval Base Point Loma, we would expect that 15 California sea lions, 1 harbor seal, 9 common dolphins, 1 Pacific white-sided dolphin, and 1 bottlenose dolphin would be sighted per day. Multiplication of the above daily occurrences times the number of pile removal days planned (84) results in the proposed Level B harassment take of 1,260 California sea lions, 84 harbor seals, 756 common dolphins, 84 Pacific white-sided dolphins, and 84 bottlenose dolphins (see Table 8 for final estimates).

The Navy has noted that northern elephant seals are very rarely seen in this area, with the only true record being of a hauled out and distressed juvenile during the Year 2 IHA (NAVFAC SW, 2015a). As a precaution that a greater number of northern elephant seal may occur around Naval Base Point Loma, we propose to authorize seven Level B takes.

TABLE 8—ESTIMATED TAKE USING THE PAST SIGHTING APPROACH FOR EACH SPECIES AND STOCK DURING THE PROPOSED PROJECT

Common name	Scientific name	Stock	Estimated sightings per day	Total Level B take requested [2]	Data source	Percent of stock
California sea lion	*Zalophus californianus*	U.S. Stock	15	1,260	NAVFAC SW (2017, 2018).	0.49.
Harbor seal	*Phoca vitulina*	California Stock	1	84	NAVFAC SW (2017, 2018).	0.27.
Northern elephant seal	*Mirounga angustirostris.*	California Breeding Stock.		[1] 7	NAVFAC SW (2015a)	0.00.
Common dolphins (Short-beaked, long-beaked).	*Delphinus sp.* [3]	California/Oregon/ Washington Stock; California Stock.	9	756 (between both species).	NAVFAC SW (2015a)	0.08 per SBCD stock; 0.31 per LBCD stock.
Pacific white-sided dolphin.	*Lagenorhynchus obliquidens.*	California/Oregon/ Washington—Northern and Southern Stocks.	1	84	NAVFAC SW (2015a)	0.31.
Bottlenose dolphin	*Tursiops truncatus*	California Coastal Stock.	1	84	NAVFAC SW (2017, 2018).	18.54.

[1] Only recently documented near the project occurrence with one distressed individual hauled out on a beach inshore to the south during the second year of the previous Fuel Pier IHA (NAVFAC SW, 2015a). A conservative estimate of 2 was assumed with a +5 take buffer added.
[2] These numbers were derived by multiplying the rounded average daily sightings by 84 days and then summed for the total requested Level B harassment take.
[3] See discussion in the section on Common Dolphins (Short-beaked and Long-beaked) regarding the Society for Marine Mammalogy's Committee on Taxonomy decision (Committee on Taxonomy, 2020).

By using the sighting-based approach, take values are not affected by the chosen isopleth sizes from Table 6.

Given the very small Level A harassment isopleths for all species, no take by Level A harassment is anticipated or proposed for this authorization.

Proposed Mitigation, Monitoring, and Reporting Measures

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses (latter not applicable for this action). NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, 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. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure would 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.

The following mitigation measures are proposed in the IHA:

- All pile removal activities will occur individually, with the exception for the removal of the 14-inch and 16-inch concrete piles, which may be removed simultaneously by use of the pile clippers;
- A 20 m (66-ft) shutdown zone will be implemented around all pile removal activities (Table 9). If a marine mammal enters the shutdown zones, pile removal activities must be delayed or halted;
- Two Protected Species Observers (PSOs) will be employed and establish monitoring locations. The Holder must establish monitoring locations as described in the Monitoring Plan. For all pile removal activities, a minimum of one PSO must be assigned to each active pile removal location to monitor the shutdown zones. PSO(s) must be able to monitor the entire shutdown zone and the entire Level B harassment zone, or out to at least 400 m of the radial distance of the larger Level B harassment zones towards the Navigation Channel. In the event of concurrent pile removal (*i.e.,* via two pile clippers) at two different locations that cannot be appropriately monitored by one PSO, the pier or location where the lead PSO is stationed being blocked by a refueling vessel or other obstruction, multiple PSOs may be necessary to monitor the necessary

shutdown and Level B harassment zones;

• If pile removal activities have been halted or delayed due to the presence of a species in the shutdown zone, activities may commence only after the animal has been visually sighted to have voluntarily exited the shutdown zone, or after 15 minutes have passed without a re-detection of the animal;

• If the take reaches the authorized limit for an authorized species, or if a marine mammal species that is not authorized for this proposed project enters the Level B harassment zone, pile removal will cease until consultation with NMFS can occur. If in-water pile removal activities are occurring when a non-authorized species enters the Level B harassment zone, activities must shutdown;

• The placement of the PSOs during all pile removal activities will ensure that the entire shutdown zone is visible. Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.,* fog, heavy rain), pile removal must be delayed until the lead PSO is confident that marine mammals within the shutdown could be detected;

• PSOs must record all observations of marine mammals as described in the Monitoring Plan, regardless of distance from the pile being driven. PSOs shall document any behavioral reactions in concert with distance from piles being driven or removed;

• The marine mammal monitoring reports must contain the informational elements described in the Monitoring Plan;

• A draft marine mammal monitoring report, and PSO datasheets and/or raw sighting data, must be submitted to NMFS within 90 calendar days after the completion of pile driving activities. If no comments are received from NMFS within 30 calendar days, the draft report will constitute the final report. If comments are received, a final report addressing NMFS comments must be submitted within 30 calendar days after receipt of comments; and

• 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* and *ITP.Potlock@noaa.gov*), NMFS and to the West Coast Regional Stranding Coordinator as soon as feasible.

TABLE 9—SHUTDOWN AND HARASSMENT ZONES

[Meters]

Pile information	Removal method	Harassment zone	Shutdown zone [1]
13-inch polycarbonate pile	One pile clipper	423	20
14-inch, 16-inch concrete piles	One pile clipper	250	
14-inch, 16-inch concrete pile	Two pile clippers	250	
14-inch, 16-inch concrete pile	Underwater chainsaw	229	
14-inch, 16-inch concrete pile	Diamond wire saw	575	
14-inch, 16-inch concrete pile	Vibratory hammer	311	

[1] The shutdown zone is the same for all mid-frequency cetaceans, phocid pinnipeds, and otariid pinnipeds.

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 would 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

Marine mammal monitoring must be conducted in accordance with the submitted Monitoring Plan and the Proposed Mitigation, Monitoring, and Reporting Measures section of the IHA. Marine mammal monitoring during pile driving and removal must be conducted by NMFS-approved PSOs in a manner consistent with the following:

• Independent PSOs (*i.e.,* not construction personnel) who have no other assigned tasks during monitoring periods must be used;

• At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

• Other PSOs may substitute education (degree in biological science or related field) or training for experience;

• Where a team of two or more PSOs are required, one PSO would be designated as the ''Command'', or lead PSO, and would coordinate all monitoring efforts. The lead PSO must have prior experience performing the duties of an observer;

• In the event of concurrent pile removal activities, two lead PSOs may be designated and would coordinate and communicate all monitoring efforts if a single observer cannot observe the two concurrent activities. Each position would act independently and both would maintain the ability to call for a shutdown. Each lead PSOs would communicate to the other of a potential sighting of a marine protected species traveling from one location to the other within the appropriate shutdown and Level B zones during concurrent pile removal activities.

• The Navy must submit PSO Curriculum Vitae (CV) for approval by NMFS prior to the onset of pile driving.

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.

Up to two PSOs would be employed. PSO locations would provide an unobstructed view of all water within the shutdown zone, and as much of the Level A and Level B harassment zones as possible. PSO locations have been discussed above. An additional monitoring location is described as follows:

(1) An additional monitoring location on the Fuel Pier trestle or on a captained vessel may be utilized for pre-activity monitoring if the monitoring zone is beyond the visual range of the lead PSO's position. This vessel would start south of the Project area (where potential marine mammal occurrence is lowest) before the pile removal activity has begun and move north.

Monitoring would be conducted 30 minutes before, during, and 30 minutes after pile removal activities. In addition, observers shall record all incidents of marine mammal occurrence, regardless of distance from activity and distance from the buffered shutdown zone and Level B harassment isopleth, and shall document any behavioral reactions in concert with distance from piles being removed.

Hydroacoustic Monitoring and Reporting

The Navy has indicated in their application that they may perform hydroacoustic monitoring on any removal method and sound source that was not previously recorded and included in the *Compendium of Underwater and Airborne Sound Data during Pile Installation and In-Water Demolition Activities in San Diego Bay, California* (NAVFAC SW, 2020). However, as data from the Compendium (for pile clippers, wire saw, and underwater chainsaw) and the City of Seattle Pier 62 project (for the vibratory hammer; Greenbusch Group, 2018) are recent, it is unlikely hydroacoustic monitoring will occur during this project.

Reporting

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

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

• Construction activities occurring during each daily observation period, including how many and what type of piles were removed and by what method (*i.e.,* vibratory and if other removal methods were used);

• Weather parameters and water conditions during each monitoring period (*e.g.,* wind speed, percent cover, visibility, sea state);

• The number of marine mammals observed, by species, relative to the pile location and if pile removal was occurring at time of sighting;

• Age and sex class, if possible, of all marine mammals observed;

• PSO locations during marine mammal monitoring;

• Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile removal was occurring at time of sighting);

• Description of any marine mammal behavior patterns during observation, including direction of travel and estimated time spent within the Level A and Level B harassment zones while the source was active;

• Number of individuals of each species (differentiated by month as appropriate) detected within the monitoring zone, and estimates of number of marine mammals taken, by species (a correction factor may be applied to total take numbers, as appropriate);

• Detailed information about any implementation of any mitigation triggered (*e.g.,* shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any;

• Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals; and

• Submit all PSO datasheets and/or raw sighting data (in a separate file from the Final Report referenced immediately above).

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

Reporting Injured or Dead Marine Mammals

In the event that personnel involved in the construction activities discover an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.,* in less than a moderate state of decomposition), the lead PSO would report to the Navy POC. The Navy POC shall then report the incident to the Office of Protected Resources (OPR), NMFS and to the regional stranding coordinator as soon as feasible. If the death or injury was clearly caused by the specified activity, the Navy 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;
- Description of marine mammals observation in the 24-hours preceding the incident;
- 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).

Level A harassment is extremely unlikely given the small size of the Level A harassment isopleths and the required mitigation measures designed to minimize the possibility of injury to marine mammals. No mortality is anticipated given the nature of the activity.

Pile removal activities have the potential to disturb or displace marine mammals. Specifically, the project activities may result in take, in the form of Level B harassment only from underwater sounds generated from pile cutting and removal activities. Takes could occur if individuals are present in the ensonified zones when these activities are underway. The potential for harassment is minimized through the construction method and the implementation of the planned mitigation measures (see Proposed Mitigation, Monitoring, and Reporting Measures section).

Take would occur within a limited, confined area (mouth of San Diego Bay) of each stock's range. Level B harassment would be reduced to the level of least practicable adverse impact through use of mitigation measures described herein. Further, the amount of take authorized is extremely small when compared to stock abundance.

Behavioral responses of marine mammals to pile removal at the project site, if any, are expected to be mild and temporary. Marine mammals within the Level B harassment zone may not show any visual cues they are disturbed by activities (as noted during modification to the Kodiak Ferry Dock (ABR, 2016; see 80 FR 60636, October 7, 2015)) or 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 the short duration of noise-generating activities per day and that pile removal would occur across six months, any harassment would be temporary. There are no areas or times of known biological importance for any of the affected species.

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 would have only minor, short-term effects on individuals. The specified activities are not expected to impact reproduction or survival of any individual marine mammals, much less affect rates of recruitment or survival and would 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 or Level A harassment is anticipated or authorized;
- No biologically important areas have been identified with the project area;
- The Navy is required to implement mitigation measures to minimize impacts, such as PSO observation and a shutdown zone of 20 m (66 ft);
- For all species, San Diego Bay is a very small and peripheral part of their range; and
- Monitoring reports from similar work in San Diego Bay have documented little to no effect on individuals of the same species impacted by the specified activities.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from the proposed activity would 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 abundances for all 6 species (refer back to Table 8). For most requested species, the proposed take of individuals is less than 1% of the abundance of the affected stock (with exception for common bottlenose dolphins at 18.54%). This is likely a conservative estimate because it assumes all take 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.

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

Unmitigable Adverse Impact Analysis and Determination

There are no relevant subsistence uses of the affected marine mammal stocks or species implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act

Section 7(a)(2) of the Endangered Species Act of 1973 (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.

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 Navy to begin the Naval Base Point Loma Fuel Pier Inboard Pile Removal Project in San Diego, California on January 15, 2022, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. Once started, the IHA would be valid for one year (end January 14, 2023). 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 proposed Naval Base Point Loma Fuel Pier Inboard Pile Removal Project. 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 would remain the same and appropriate, and the findings in the initial IHA remain valid.

Dated: July 15, 2021.

Catherine Marzin,

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

[FR Doc. 2021–15378 Filed 7–19–21; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XB255]

Gulf of Mexico Fishery Management Council; Public Meeting

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

ACTION: Notice of a public meeting.

SUMMARY: The Gulf of Mexico Fishery Management Council (Council) will hold a three-day in-person and virtual (hybrid) meeting of its Standing, Reef Fish, Socioeconomic, and Ecosystem Scientific and Statistical Committees (SSC).

DATES: The meeting will take place Monday, August 9 to Wednesday, August 11, 2021, from 8:30 a.m. to 5 p.m., EDT daily.

ADDRESSES: The in-person meeting will take place at the Gulf Council office. If you are unable to travel, you may attend via webinar. Registration information will be available on the Council's website by visiting *www.gulfcouncil.org* and clicking on the SSC meeting on the calendar.

Council address: Gulf of Mexico Fishery Management Council, 4107 W Spruce Street, Suite 200, Tampa, FL 33607; telephone: (813) 348–1630.

FOR FURTHER INFORMATION CONTACT: Ryan Rindone, Lead Fishery Biologist, Gulf of Mexico Fishery Management Council; *ryan.rindone@gulfcouncil.org,* telephone: (813) 348–1630.

SUPPLEMENTARY INFORMATION:

Monday, August 9, 2021; 8:30 a.m.–5 p.m., EDT

The meeting will begin with Introductions and Adoption of Agenda, Approval of Verbatim Minutes and Meeting Summary from the May 3–4, 2021 webinar meeting, Election of Chair and Vice Chair and review of Scope of Work. The Committees will select an SSC Representative for the August 23–26, 2021 Gulf Council Meeting and review and discuss the SSC's Best Practices and Voting Procedures.

The Committees will review and hold a discussion on the Finalized Great Red Snapper Count (GRSC) Project Report, including presentations, background material on the finalized report and independent consultant reports. The Committees will review and discuss the updated Red Grouper Interim Analysis and Research Track and Operational Assessment Process Guidance Document, including a presentations, report, and background material.

The Committees will review Discuss the Research Track and Operational Assessment Process Guidance Document, followed by a Determination of Topical Working Groups for SEDAR 75: Gulf of Mexico Gray Snapper Operational Assessment. The Committees will then review and discuss the Scope of Work for Red