reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

With respect to military readiness activities, the MMPA defines ''harassment'' as: ''(i) any act that injures or has the significant potential to injure a marine mammal stock in the wild [Level A Harassment]; or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment].''

Summary of Request

On July 28, 2014, NMFS received an application from the Navy requesting a Letter of Authorization (LOA) for the take of 19 species of marine mammals incidental to Navy training activities to be conducted in the Gulf of Alaska Temporary Maritime Activities Area (GOA TMAA) over 5 years. The Navy requests a 5-year LOA for training activities to be conducted from 2016 through 2021. The GOA TMAA is a polygon roughly the shape of a 300 nm by 150 nm rectangle oriented northwest to southeast in the long direction (see Figure 1–1 of the Navy's application for a map of the GOA TMAA). The activities conducted within the GOA TMAA are classified as military readiness activities. The Navy states that these activities may expose some of the marine mammals present within the GOA TMAA to sound from underwater acoustic sources and explosives. The Navy requests authorization to take 19 marine mammal species by Level B (behavioral) harassment; one of those marine mammal species (Dall's porpoise) may be taken by Level A (injury) harassment.

Description of the Specified Activity

In the application submitted to NMFS, the Navy requests authorization to take marine mammals incidental to conducting anti-surface warfare and anti-submarine warfare training activities. Detailed descriptions of these activities, including duration, location, and equipment involved, are provided in the Navy's application. The Navy has also prepared a Draft Supplemental Environmental Impact Statement (DSEIS) analyzing the effects on the human environment of implementing their preferred alternative (among others).

Information Solicited

Interested persons may submit information, suggestions, and comments concerning the Navy's request (see **ADDRESSES**). All input related to the Navy's GOA TMAA request and NMFS' role in governing the incidental taking of marine mammals will be considered by NMFS when developing, if appropriate, the most effective regulations governing the issuance of a Letter of Authorization.

Dated: August 29, 2014.

Donna S. Wieting,

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

[FR Doc. 2014–21141 Filed 9–4–14; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XD445

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to a Pier Replacement Project

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

ACTION: Notice; proposed incidental harassment authorization; request for comments.

SUMMARY: NMFS has received a request from the U.S. Navy (Navy) for authorization to take marine mammals incidental to construction activities as part of a pier replacement project. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an incidental harassment authorization (IHA) to the Navy to incidentally take marine mammals, by Level B Harassment only, during the specified activity.

DATES: Comments and information must be received no later than October 6, 2014.

ADDRESSES: Comments on the application should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service. Physical comments should be sent to 1315 East-West Highway, Silver Spring, MD 20910 and electronic comments should be sent to *ITP.Laws@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 received electronically, including all attachments, must not exceed a 25-megabyte file size. Attachments to electronic comments will be accepted in Microsoft Word or Excel or Adobe PDF file formats only. All comments received are a part of the public record and will generally be posted to the Internet at *www.nmfs.noaa.gov/pr/permits/incidental.htm* 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: Ben Laws, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION:

Availability

An electronic copy of the Navy's application and supporting documents, as well as a list of the references cited in this document, may be obtained by visiting the Internet at: *www.nmfs.noaa.gov/pr/permits/incidental.htm.* In case of problems accessing these documents, please call the contact listed above.

National Environmental Policy Act (NEPA)

The Navy prepared an Environmental Assessment (EA; 2013) for its pier replacement project. We subsequently adopted the EA and signed our own Finding of No Significant Impact (FONSI) prior to issuing the first IHA for this project, in accordance with NEPA and the regulations published by the Council on Environmental Quality. Information in the Navy's application, the Navy's EA, and this notice collectively provide the environmental information related to proposed issuance of this IHA for public review and comment. All documents are available at the aforementioned Web site. We will review all comments submitted in response to this notice as we complete the NEPA process, including a decision of whether to reaffirm the existing FONSI, prior to a final decision on the incidental take authorization request.

Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce 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 authorization is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined ''negligible impact'' in 50 CFR 216.103 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.''

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the U.S. can apply for an authorization to incidentally take small numbers of marine mammals by harassment. Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny the authorization. Except with respect to certain activities not pertinent here, 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].''

Summary of Request

On July 8, 2014, we received a request from the Navy for authorization to take marine mammals incidental to pile installation and removal associated with a pier replacement project in San Diego Bay at Naval Base Point Loma in San Diego, CA (NBPL), followed on July 14, 2014, by a draft monitoring report for activities conducted under the previous IHA issued for this project. We reviewed these documents and provided a request for additional information to the Navy on August 5, 2014; the Navy submitted revised versions of the request on August 14 and August 19, 2014, the latter of which we deemed adequate and complete. The pier replacement project is planned to occur over four years; this proposed IHA would cover only the second year of work and would be valid for a period of one year from the date of issuance. Hereafter, use of the generic term ''pile driving'' may refer to both pile installation and removal unless otherwise noted.

The use of both vibratory and impact pile driving is expected to produce underwater sound at levels that have the potential to result in behavioral harassment of marine mammals. Species with the expected potential to be present during all or a portion of the in-water work window include the California sea lion (*Zalophus californianus*), harbor seal (*Phoca vitulina richardii*), bottlenose dolphin (*Tursiops truncatus truncatus*), gray whale (*Eschrichtius robustus*), and either short-beaked or long-beaked common dolphins (*Delphinus* spp.). California sea lions are present year-round and are common in the project area, while bottlenose dolphins may be present year-round but sightings are highly variable in Navy marine mammal surveys of northern San Diego Bay. Harbor seals are also common but have limited occurrence in the project area in comparison with sea lions. Gray whales may be observed in San Diego Bay sporadically during migration periods. Common dolphins are known to occur in nearshore waters outside San Diego Bay, but are only rarely observed near or in the bay.

This would be the second such IHA, if issued, following the IHA issued effective from September 1, 2013, through August 31, 2014 (78 FR 44539). A monitoring report is available on the Internet at *www.nmfs.noaa.gov/pr/permits/incidental.htm* and provides environmental information related to proposed issuance of this IHA for public review and comment.

Description of the Specified Activity

Overview

NBPL provides berthing and support services for Navy submarines and other fleet assets. The existing fuel pier serves as a fuel depot for loading and unloading tankers and Navy underway replenishment vessels that refuel ships at sea (''oilers''), as well as transferring fuel to local replenishment vessels and other small craft operating in San Diego Bay, and is the only active Navy fueling facility in southern California. Portions of the pier are over one hundred years old, while the newer segment was constructed in 1942. The pier as a whole is significantly past its design service life and does not meet current construction standards.

Over the course of four years, the Navy plans to demolish and remove the existing pier and associated pipelines and appurtenances while simultaneously replacing it with a generally similar structure that meets relevant standards for seismic strength and is designed to better accommodate modern Navy ships. Demolition and construction are planned to occur in two phases to maintain the fueling capabilities of the existing pier while the new pier is being constructed. During the second year of construction (the specified activity considered under this proposed IHA), approximately 272 piles (18- to 36-in steel pipe piles) would be installed and 402 piles would be removed (via multiple methods) over the course of a maximum 135 in-water construction days. All steel piles will be driven with a vibratory hammer for their initial embedment depths and finished with an impact hammer, as necessary.

The proposed actions with the potential to incidentally harass marine mammals within the waters adjacent to NBPL are vibratory and impact pile installation and removal of piles via vibratory hammer or pneumatic chipper. Concurrent use of multiple pile driving rigs is not planned; however, pile removal conducted as part of demolition activities (which could occur via a number of techniques other than use of a vibratory hammer) is expected to occur concurrently with pile installation conducted as part of construction activities.

Dates and Duration

The entire project is scheduled to occur from 2013–17; the proposed activities that would be authorized by this IHA, during the second year of work, would occur for one year from the date of issuance of this proposed IHA. Under the terms of a memorandum of understanding (MOU) between the Navy and the U.S. Fish and Wildlife Service (FWS), all noise- and turbidity-producing in-water activities in designated least tern foraging habitat are to be avoided during the period when least terns are present and engaged in nesting and foraging (a window from approximately September 15 through April 1). However, the Navy is currently negotiating with FWS to extend that window and it is possible that in-water work, as described below, could occur at any time during the period of validity of this proposed IHA. The conduct of any such work would be subject to approval from FWS under the terms of

the MOU. We expect that in-water work would primarily occur during the October 1–April 1 period. In-water pile driving work would be limited to 135 days in total under this proposed IHA. Pile driving would occur during normal working hours (approximately 7 a.m. to 4 p.m.).

Specific Geographic Region

NBPL is located on the peninsula of Point Loma near the mouth and along the northern edge of San Diego Bay (see Figures 1–1 and 1–2 in the Navy's application). San Diego Bay is a narrow, crescent-shaped natural embayment oriented northwest-southeast with an approximate length of 24 km and a total area of roughly 4,500 ha. The width of the bay ranges from 0.3 to 5.8 km, and depths range from 23 m mean lower low water (MLLW) near the tip of Ballast Point to less than 2 m at the southern end (see Figure 2–1 of the Navy's application). San Diego Bay is a heavily urbanized area with a mix of industrial, military, and recreational uses. The northern and central portions of the bay have been shaped by historic dredging to support large ship navigation. Dredging occurs as necessary to maintain constant depth within the navigation channel. Outside the navigation channel, the bay floor consists of platforms at depths that vary slightly. Sediments in northern San Diego Bay are relatively sandy 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. San Diego Bay is heavily used by commercial, recreational, and military vessels, with an average of over 80,000 vessel movements (in or out of the bay) per year (not including recreational boating within the Bay) (see Table 2–2 of the Navy's application). For more information about the specific geographic region, please see section 2.3 of the Navy's application.

Detailed Description of Activities

In order to provide context, we described the entire project in our **Federal Register** notice of proposed authorization associated with the first-year IHA (78 FR 30873; May 23, 2013). Please see that document for an overview of the entire fuel pier replacement project, or see the Navy's Environmental Assessment (2013) for more detail. Here, we provide an overview of relevant construction methods before describing only the specific project portions scheduled for completion during the second work window. Approximately 498 piles in total are planned to be installed for the project, including steel, concrete, and plastic piles. For the second year of work, approximately 272 piles would be installed (all steel pipe piles, 18- to 36-in). Tables 1 and 2 detail the piles to be installed and removed, respectively, under this proposed IHA.

Methods, Pile Installation—Vibratory hammers, which can be used to either install or extract a pile, contain a system of counter-rotating eccentric weights powered by hydraulic motors and are designed in such a way that horizontal vibrations cancel out, while vertical vibrations are transmitted into the pile. The pile driving machine is lifted and positioned over the pile by means of an excavator or crane, and is fastened to the pile by a clamp and/or bolts. The vibrations produced cause liquefaction of the substrate surrounding the pile, enabling the pile to be extracted or driven into the ground using the weight of the pile plus the hammer. Impact hammers use a rising and falling piston to repeatedly strike a pile and drive it into the ground.

We generally require that vibratory driving be used to the maximum extent feasible, considering project design requirements and site conditions. Steel piles are typically vibratory-driven for their initial embedment depths or to refusal and finished with an impact hammer for proofing or until the pile meets structural requirements (potentially an approximate 25–125 blows), as necessary. Proofing involves striking a driven pile with an impact hammer to verify that it provides the required load-bearing capacity, as indicated by the number of hammer blows per foot of pile advancement. Non-steel piles—not planned for installation during this proposed activity—are typically impact-driven for their entire embedment depth, in part because non-steel piles are often displacement piles (as opposed to pipe piles) and require some impact to allow substrate penetration.

The Navy assumes that the contractor will drive approximately two steel piles per day, with each pile assumed to require up to two hours of driving, including 1–1.5 hours of vibratory pile driving and up to 0.5 hour of impact pile driving (if necessary).

Methods, Pile Removal—There are multiple methods for pile removal, including dry pulling, cutting at the mudline, jetting, and vibratory removal. Typically piles will be cut off at the mudline; however, the full length of the piles would be pulled at the area where the new approach segment would be constructed. An attempt will first be made to dry pull the piles with a barge-mounted crane. A vibratory hammer or a pneumatic chipper may be used to loosen the piles. Jetting (the application of a focused stream of water under high pressure) would be another option to loosen piles that could not be removed through the previous procedures. Existing caisson elements would be removed with a clamshell, which is a dredging bucket consisting of two similar halves that open/close at the bottom and are hinged at the top. The clamshell would be used to grasp and lift large components. When a wooden pile cannot be completely pulled out, the pile may be cut at the mudline using the clamshell's hydraulic jaws and/or a diver-operated underwater chainsaw, except for piles that are within the footprint of the approach pier, which may require jetting to remove. The majority of pile removal will likely not require the use of vibratory extraction and/or pneumatic chipping, and these methods are included here as contingency in the event other methods of extraction are not successful.

Indicator Pile Program (Fall 2014)—The Indicator Pile Program (IPP) was designed to validate the length of pile required and the method of installation (vibratory and impact). The original plan called for approximately twelve steel pipe piles (36- and 48-in diameter) to be driven in the new pier alignment to verify the driving conditions and establish the final driving lengths prior to fabrication of the final production piles that would be used to construct the new pier. However, the Navy determined that 36-in piles would likely be sufficient for structural requirements of the new fuel pier and conducted the IPP under the previous IHA with 30- and 36-in piles (see ''Results of Previous Monitoring'' below). The Navy drove nine piles (two 30-in and seven 36-in piles) and plans to conclude the IPP under this proposed IHA by driving an additional two 36-in steel pipe piles.

TABLE 1—DETAILS OF PILES TO BE INSTALLED

Purpose	Location	Planned timing	Planned number of days	Number per pile diameter (in)			
				18	24	30	36
Indicator Pile Program	Outboard side of existing pier	Fall 2014	1	0	0	0	2
Temporary dolphin	South of existing pier	Fall 2014	5	0	0	10	0
Temporary shoring piles	Existing pier approach and intersection.	Fall 2014	5	4	0	0	0
Temporary trestle piles	North of new approach trestle	Fall 2014	14	0	16	0	0
Abutment piles	New pier, along shoreline	Winter 2014–15	10	0	0	0	18
Approach pier	New pier footprint	Fall 2014–Spring 2015	90	0	0	0	104
Fuel pier	New pier footprint	Fall 2014		0	0	0	95
Permanent dolphins	North of existing pier	Spring 2015	10	0	0	23	0
Totals—272 piles		Fall 2014–Spring 2015	[1]135	4	16	33	219

[1] Numbers of piles, timing, and number of days associated with any particular component of work are subject to change. However, the total of 135 days in-water pile driving is an absolute maximum.

Temporary Structures—The Navy plans to install a number of temporary piles in order to maintain fuel pier function during the demolition/construction work. A temporary mooring dolphin (a structure that extends above the water level and is not connected to shore or other structures, and are often used to extend mooring capacity of a pier) will be constructed to allow vessels to berth and load/unload fuel on the existing south segment while the north segment of the existing pier is under demolition.

Permanent Structures—Initial work for construction of the new pier is planned to begin during the period of this proposed IHA, including construction of abutments at the shoreside end of the approach segment for the new fuel pier and construction of the pier itself. The latter will include work on the ramped approach pier (lower and upper deck), two mooring dolphins, and the double-deck fueling pier.

Demolition—Following construction of temporary structures and as construction of the new pier proceeds, demolition of the north segment of the existing pier will be conducted. Much of the demolition work will be above-water, involving removal of decking, utilities, and appurtenances, but in-water structure removal will also occur, as described above under ''Methods, Pile Removal.'' Demolition work planned during the period of this proposed IHA is expected to require 84 days in total. Any of the previously-described methodologies could be employed for in-water demolition work; however, the Navy anticipates that those methodologies producing underwater sound with the potential to cause incidental harassment of marine mammals would only be required for approximately one-quarter of the total effort. In-water demolition would always occur concurrently with in-water pile installation; therefore, sound produced through in-water demolition would always be subsumed by that produced through in-water pile installation. Pile removal activities are not carried forward through the take estimation process (see ''Estimated Incidental Take''). Pile removal using no-impact methods (e.g., dry pull) may continue outside the in-water work window.

TABLE 2—DETAILS OF PILES TO BE REMOVED

Pile type	Number
Concrete fender piles (14-, 18-, and 24-in)	65
Plastic fender piles (13-in)	29
Timber piles (12-in)	286
Concrete-filled steel caissons	22
Total	402

Description of Work Accomplished

During the first in-water work season, two primary activities were conducted: Relocation of the Marine Mammal Program and the IPP.

The Navy Marine Mammal Program, administered by Space and Naval Warfare Systems Command (SPAWAR) Systems Center (SSC), was moved approximately three kilometers to the Naval Mine and Anti-submarine Warfare Command (NMAWC; see Figures 1–1 and 1–2 of the Navy's monitoring report). Although not subject to the MMPA, SSC's working animals were temporarily relocated so that they will not be affected by the project. Over the course of 25 in-water construction days from January 28 to March 13, 2014, the Navy removed thirty and installed 81 concrete piles (12- and 16-in). See Table 3–2 of the Navy's monitoring report for details. Installation was accomplished via a D19–42 American Pile Driving Equipment, Inc. (APE) diesel hammer with energy capacity of 23,566–42,800 ft-lbs and fitted with a hydraulic tripping cylinder with four adjustable power settings that could be reset while driving. Pile removal was accomplished by jetting and dead pull.

The IPP was described above. Nine steel pipe test piles were vibratory- and impact-driven over ten work days from April 28 to May 15, 2014, including two 30-in and seven 36-in piles. For the IPP all piles were initially installed initially using an APE Variable Moment 250 VM Vibratory Hammer Extractor powered by a model 765 hydraulic power source creating a maximum driving force of 2,389 kilonewtons (269 tons). Impact pile driving equipment consisted of a single acting diesel impact hammer model D62–22 DELMAG with energy capacity of 76,899–153,799 ft-lbs and fitted with a hydraulic tripping cylinder with four adjustable power settings that could be reset while driving. Two more 36-in piles are planned under the currently proposed IHA for conclusion of the IPP.

Description of Marine Mammals in the Area of the Specified Activity

There are five marine mammal species which are either resident, have known seasonal occurrence, or have been observed recently in San Diego Bay, including the California sea lion, harbor seal, bottlenose dolphin, common dolphin, and gray whale. Note that common dolphins could be either short-beaked (*Delphinus delphis delphis*) or long-beaked (*D. capensis capensis*). While it is likely that common dolphins observed in the project area would be long-beaked, as it is the most frequently stranded species in the area from San Diego Bay to the

U.S.-Mexico border (Danil and St. Leger, 2011), the species distributions overlap and it is unlikely that observers would be able to differentiate them in the field. Therefore, we consider that any common dolphins observed—and any incidental take of common dolphins—could be either species. Navy records and other survey results indicate that other species that occur in the Southern California Bight may have the potential for isolated occurrence within San Diego Bay or just offshore. The Pacific white-sided dolphin (*Lagenorhynchus obliquidens*) has been sighted along a previously used transect on the opposite side of the Point Loma peninsula (Merkel and Associates, 2008). Risso's dolphin (*Grampus griseus*) is fairly common in southern California coastal waters (e.g., Campbell *et al.,* 2010), but has not been seen in San Diego Bay. These species have not been observed near the project area and are not expected to occur there, and, given the unlikelihood of their exposure to sound generated from the project, are not considered further.

We have reviewed the Navy's detailed species descriptions, including life history information, for accuracy and completeness and refer the reader to Sections 3 and 4 of the Navy's application instead of reprinting the information here. Please also refer to NMFS' Web site (*www.nmfs.noaa.gov/pr/species/mammals*) for generalized species accounts and to the Navy's Marine Resource Assessment for the Southern California and Point Mugu Operating Areas, which provides information regarding the biology and behavior of the marine resources that may occur in those operating areas (DoN, 2008). The document is publicly available at *www.navfac.navy.mil/products_and_services/ev/products_and_services/marine_resources/marine_resource_assessments.html* (accessed August 23, 2014). In addition, we provided information for the potentially affected stocks, including details of stock-wide status, trends, and threats, in our **Federal Register** notice of proposed authorization associated with the first-year IHA (78 FR 30873; May 23, 2013) and refer the reader to that document rather than reprinting the information here.

Table 3 lists the marine mammal species with expected potential for occurrence in the vicinity of NBPL during the project timeframe and summarizes key information regarding stock status and abundance. See also Figure 3–2 of the Navy's application for observed occurrence of marine mammals in the project area. Taxonomically, we follow Committee on Taxonomy (2014). Please see NMFS' Stock Assessment Reports (SAR), available at *www.nmfs.noaa.gov/pr/sars,* for more detailed accounts of these stocks' status and abundance. All potentially affected species are addressed in the Pacific SARs (Carretta *et al.,* 2014).

TABLE 3—MARINE MAMMALS POTENTIALLY PRESENT IN THE VICINITY OF NBPL

Species	Stock	ESA/MMPA status; strategic (Y/N) [1]	Stock abundance (CV, N_{min}, most recent abundance survey) [2]	PBR [3]	Annual M/SI [4]	Relative occurrence in San Diego Bay; season of occurrence
Order Cetartiodactyla—Cetacea—Superfamily Mysticeti (baleen whales)						
Family Eschrichtiidae:						
Gray whale	Eastern North Pacific	—; N	19,126 (0.071; 18,017; 2007).	558	[6] 127	Rare migratory visitor; late winter.
Superfamily Odontoceti (toothed whales, dolphins, and porpoises)						
Family Delphinidae:						
Bottlenose dolphin	California coastal	—; N	323 [5] (0.13; 290; 2005)	2.4	0.2	Occasional; year-round.
Short-beaked common dolphin.	California/Oregon/Washington.	—; N	411,211 (0.21; 343,990; 2008).	3,440	64	Rare; year-round (but more common in warm season).
Long-beaked common dolphin.	California	—; N	107,016 (0.42; 76,224; 2009).	610	13.8	Rare; year-round (but more common in warm season).
Order Carnivora—Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions):						
California sea lion	U.S.	—; N	296,750 (n/a; 153,337; 2008).	9,200	≥431	Abundant; year-round.
Family Phocidae (earless seals):						
Harbor seal	California	—; N	30,196 (0.157; 26,667; 2009).	1,600	31	Uncommon and localized; year-round.

[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 (see footnote 3) 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] CV is coefficient of variation; N_{min} is the minimum estimate of stock abundance. In some cases, CV is not applicable. For certain stocks of pinnipeds, abundance estimates are based upon observations of animals (often pups) ashore multiplied by some correction factor derived from knowledge of the specie's (or similar species') life history to arrive at a best abundance estimate; therefore, there is no associated CV. In these cases, the minimum abundance may represent actual counts of all animals ashore.

[3] Potential biological removal, 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 size (OSP).

[4] These values, found in NMFS' SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial fisheries, subsistence hunting, ship strike). Annual M/SI often cannot be determined precisely and is in some cases presented as a minimum value.

[5] This value is based on photographic mark-recapture surveys conducted along the San Diego coast in 2004–05, but is considered a likely underestimate, as it does not reflect that approximately 35 percent of dolphins encountered lack identifiable dorsal fin marks (Defran and Weller, 1999). If 35 percent of all animals lack distinguishing marks, then the true population size would be closer to 450–500 animals (Carretta *et al.,* 2014).

[6] Includes annual Russian harvest of 123 whales.

California Sea Lion

The California sea lion is by far the most commonly-sighted pinniped species at sea or on land in the vicinity of NBPL and northern San Diego Bay, where there is a resident non-breeding population. California sea lions regularly occur on rocks, buoys and other structures, and especially on the bait barges present in the bay adjacent to NBPL (see Figure 4–1 of the Navy's application), although numbers vary greatly as individuals move between the bay and rookeries on offshore islands. 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 subadult 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 (using geographical positioning systems). The majority of observations are of animals hauled out.

Harbor Seal

Harbor seals are relatively uncommon within San Diego Bay, and do not have a significant mainland California distribution south of Point Mugu. Sightings in the Navy transect surveys of northern San Diego Bay cited above have generally been limited to individuals outside of the project area, on the south side of Ballast Point. The haul-out area south of Ballast Point is only temporary with overwash of the rocks occurring daily; primary local harbor seal haul-outs are in La Jolla. With heavy vessel traffic and noise in the project area, it is likely that harbor seals seen outside the project area at Ballast Point move toward Point Loma and preferred foraging habitat rather than actively foraging in or transiting the project area on a frequent basis. However, Navy marine mammal monitoring for another project conducted intermittently from 2010–12 documented several harbor seals near Pier 122 (within the project area) at various times, with the greatest number of sightings during April and May. Subsequently, Navy monitoring conducted during year one 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 NBPL shoreline.

Gray Whale

Two populations of gray whales are recognized, Eastern and Western North Pacific (ENP and WNP). ENP whales breed and calve primarily in areas off Baja California and in the Gulf of California. From February to May, whales typically migrate northbound to summer/fall feeding areas in the Chukchi and northern Bering Seas, with the southbound return to calving areas typically occurring in November and December. WNP whales are known to feed in the Okhotsk Sea and off of Kamchatka before migrating south to poorly known wintering grounds, possibly in the South China Sea.

The two populations have historically been considered geographically isolated from each other; however, recent data from satellite-tracked whales indicates that there is some overlap between the stocks. Two WNP whales were tracked from Russian foraging areas along the Pacific rim to Baja California (Mate *et al.,* 2011), and, in one case where the satellite tag remained attached to the whale for a longer period, a WNP whale was tracked from Russia to Mexico and back again (IWC, 2012). Between 22–24 WNP whales are known to have occurred in the eastern Pacific through comparisons of ENP and WNP photo-identification catalogs (IWC, 2012; Weller *et al.,* 2011; Burdin *et al.,* 2011), and WNP animals comprised 8.1 percent of gray whales identified during a recent field season off of Vancouver Island (Weller *et al.,* 2012). In addition, two genetic matches of WNP whales have been recorded off of Santa Barbara, CA (Lang *et al.,* 2011). More recently, Urban *et al.* (2013) compared catalogs of photo-identified individuals from Mexico with photographs of whales off Russia and reported a total of 21 matches. Therefore, a portion of the WNP population is assumed to migrate, at least in some years, to the eastern Pacific during the winter breeding season.

However, only ENP whales are expected to occur in the project area. The likelihood of any gray whale being exposed to project sound to the degree considered in this document is already low, as it would require a migrating whale to linger for an extended period of time, or for multiple migrating whales to linger for shorter periods of time. While such an occurrence is not unknown, it is uncommon. Further, of the approximately 20,000 gray whales migrating through the Southern California Bight, it is extremely unlikely that one found in San Diego Bay would be one of the approximately twenty WNP whales that have been documented in the eastern Pacific (less than one percent probability). The likelihood that a WNP whale would be exposed to elevated levels of sound from the specified activities is insignificant and discountable and WNP whales are not considered further in this document.

Peak abundance of gray whales off the coast of San Diego is typically during January during the southbound migration and in March as whales return north, although females with calves, which depart Mexico later than males or females without calves, can be sighted from March through May or June (Leatherwood, 1974; Poole, 1984; Rugh *et al.,* 2001). Gray whales are not expected in the project area except during the northward migration, when they are closest to the coast and may be infrequently observed offshore of San Diego Bay (Rice *et al.,* 1981). Migrating gray whales that do transit nearshore waters would likely be traveling, rather than foraging, and would likely be present only briefly at typical travel speeds of 3 kn (Perryman *et al.,* 1999, Mate and Urbán-Ramirez, 2003). Gray whales are known to occur near the mouth of San Diego Bay, and occasionally enter the bay. However, their occurrence in San Diego Bay is sporadic and unpredictable. In recent years, local records show that solitary individuals have entered the bay and remained for varying lengths of time during March 2009, April 2010, and July 2011. Navy field notes show an occurrence of one gray whale that lingered in the northern part of the bay for two weeks.

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. 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).

Common Dolphin

Common dolphins are present in the coastal waters outside of San Diego Bay, but are considered to be an intermittent and transient visitor to the bay itself and had not been observed within the bay during Navy surveys conducted prior to the project. 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 IPP. Sightings of long-beaked common dolphins are predominantly near shore, whereas those of short-beaked common dolphins extend throughout the coastal and offshore waters (Carretta *et al.* 2014). The long-beaked common dolphin has been documented during Navy training exercises just offshore and to the south of San Diego Bay (Danil and St. Leger, 2011), whereas the short-beaked species has not.

Potential Effects of the Specified Activity on Marine Mammals

This section is intended to provide a summary and discussion of the ways that components of the specified activity may impact marine mammals. This discussion includes reactions that we consider to rise to the level of a take and those that we do not consider to rise to the level of a take (for example, with acoustics, we may include a discussion of studies that showed animals not reacting at all to sound or exhibiting barely measurable avoidance). This information is provided as a background of potential effects and does not consider either the specific manner in which this activity will be carried out or the mitigation that will be implemented, and how either of those will shape the anticipated impacts from this specific activity. The ''Estimated Take by Incidental Harassment'' section later in this document will include a quantitative analysis of the number of individuals that are expected to be taken by this activity. The ''Negligible Impact Analysis'' section will include the analysis of how this specific activity will impact marine mammals and will consider the content of this section, the ''Estimated Take by Incidental Harassment'' section, the ''Proposed Mitigation'' section, and the ''Anticipated Effects on Marine Mammal Habitat'' section to draw conclusions regarding the likely impacts of this activity on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks.

In our **Federal Register** notice of proposed authorization associated with the first-year IHA (78 FR 30873; May 23, 2013), we described in detail the potential effects of the Navy's proposed activity on marine mammals, including general background information on sound and marine mammal hearing and a description of sound sources and ambient sound. Rather than reprint the information here, we refer the reader to that document. However, because these terms are used frequently in this document, we provide brief definitions of relevant acoustic terminology below:

- Sound Pressure Level (SPL): Sound pressure is the force per unit area, usually expressed in microPascals (μPa), where one Pascal equals one Newton exerted over an area of one square meter. The SPL is expressed in decibels (dB) as twenty times the logarithm to the base ten of the ratio between the pressure exerted by the sound to a referenced sound pressure. SPL is the quantity that is directly measured by a sound level meter. For underwater sound, SPL in dB is referenced to one microPascal (re 1 μPa), unless otherwise stated. For airborne sound, SPL in dB is referenced to 20 microPascals (re 20 μPa), unless otherwise stated.
- Frequency: Frequency is expressed in terms of oscillations, or cycles, per second. Cycles per second are commonly referred to as hertz (Hz). Typical human hearing ranges from 20 Hz to 20 kilohertz (kHz).
- Peak sound pressure: The instantaneous maximum of the absolute positive or negative pressure over the frequency range from 20 Hz to 20 kHz and presented in dB.
- Root mean square SPL: For impact pile driving, overall dB rms levels are characterized by integrating sound for each waveform across ninety percent of the acoustic energy in each wave and averaging all waves in the pile driving event. This value is referred to as the rms 90%. With this method, the time averaging per pulse varies.
- Sound Exposure Level (SEL): A measure of energy, specifically the dB level of the time integral of the squared-instantaneous sound pressure, normalized to a one second period. It is a useful metric for assessing cumulative exposure because it enables sounds of differing duration, to be compared in terms of total energy. The accumulated SEL (SEL_{cum}) is used to describe the SEL from multiple events (e.g., many pile strikes). This can be calculated directly as a logarithmic sum of the individual single-strike SELs for the pile strikes that were used to install the pile.
- Level Z weighted (unweighted), equivalent (LZ_{eq}): LZ_{eq} is a value recorded by the SLM that represents SEL SPL over a specified time period or interval. The LZeq is most typically referred to in one-second intervals or over an entire event.
- Level Z weighted (unweighted), fast (LZF_{max}): LZF_{max} is a value recorded by the SLM that represents the maximum rms value recorded for any 125 millisecond time frame during each individual recording.

Anticipated Effects on Habitat

In our **Federal Register** notice of proposed authorization associated with the first-year IHA (78 FR 30873; May 23, 2013), we described in detail the anticipated effects of the Navy's proposed activity on marine mammal habitat, including effects to prey and to foraging habitat. Rather than reprint the information here, we refer the reader to that document.

In summary, given the short daily duration of sound associated with individual pile driving events and the relatively small areas being affected, pile driving activities associated with the proposed action are not likely to have a permanent, adverse effect on any fish habitat, or populations of fish species. The area around NBPL is heavily altered with significant levels of industrial and recreational activity, and is unlikely to harbor significant amounts of forage fish. Thus, any impacts to marine mammal habitat are not expected to cause significant or long-term consequences for individual marine mammals or their populations.

Proposed Mitigation

In order to issue an IHA under Section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses.

The mitigation strategies described below largely follow those required and successfully implemented under the first-year IHA. For this proposed IHA,

data from acoustic monitoring conducted during the first year of work was used to estimate zones of influence (ZOIs; see ''Estimated Take by Incidental Harassment''); these values were used to develop mitigation measures for pile driving activities at NBPL. The ZOIs effectively represent the mitigation zone that would be established around each pile to prevent Level A harassment to marine mammals, while providing estimates of the areas within which Level B harassment might occur. In addition to the measures described later in this section, the Navy would employ the following standard mitigation measures:

(a) Conduct briefings between construction supervisors and crews, marine mammal monitoring team, acoustical monitoring team, and Navy staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

(b) For in-water heavy machinery work with the potential to affect marine mammals (other than pile driving), if a marine mammal comes within 10 m, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions. This type of work could include the following activities: (1) Movement of the barge to the pile location and (2) removal of the pile from the water column/substrate via a crane (i.e., dead pull). For these activities, monitoring would take place from 15 minutes prior to initiation until the action is complete.

Monitoring and Shutdown for Pile Driving

The following measures would apply to the Navy's mitigation through shutdown and disturbance zones:

Shutdown Zone—For all pile driving and removal activities, the Navy will establish a shutdown zone intended to contain the area in which SPLs equal or exceed the 180/190 decibel (dB) root mean square (rms) acoustic injury criteria. The purpose of a shutdown zone is to define an area within which shutdown of activity would occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area), thus preventing injury of marine mammals (serious injury or death are unlikely outcomes even in the absence of mitigation measures). Radial distances for shutdown zones are shown in Table 7. For certain activities, the shutdown zone would not exist because source levels are lower than the threshold, or the source levels indicate that the radial distance to the threshold would be less than 10 m. However, a minimum shutdown zone of 10 m will be established during all pile driving and removal activities, regardless of the estimated zone. These precautionary measures are intended to prevent the already unlikely possibility of physical interaction with construction equipment and to establish a precautionary minimum zone with regard to acoustic effects.

Disturbance Zone—Disturbance zones are the areas in which SPLs equal or exceed 160 and 120 dB rms (for impulse and continuous sound, respectively). Disturbance zones provide utility for monitoring conducted for mitigation purposes (i.e., shutdown zone monitoring) by establishing monitoring protocols for areas adjacent to the shutdown zones. Monitoring of disturbance zones enables observers to be aware of and communicate the presence of marine mammals in the project area but outside the shutdown zone and thus prepare for potential shutdowns of activity. However, the primary purpose of disturbance zone monitoring is for documenting incidents of Level B harassment; disturbance zone monitoring is discussed in greater detail later (see ''Proposed Monitoring and Reporting''). Nominal radial distances for disturbance zones are shown in Table 7.

In order to document observed incidences of harassment, monitors record all marine mammal observations, regardless of location. The observer's location, as well as the location of the pile being driven, is known from a GPS. The location of the animal is estimated as a distance from the observer, which is then compared to the location from the pile. If acoustic monitoring is being conducted for that pile, a received SPL may be estimated, or the received level may be estimated on the basis of past or subsequent acoustic monitoring. It may then be determined whether the animal was exposed to sound levels constituting incidental harassment in post-processing of observational and acoustic data, and a precise accounting of observed incidences of harassment created. Therefore, although the predicted distances to behavioral harassment thresholds are useful for estimating incidental harassment for purposes of authorizing levels of incidental take, actual take may be determined in part through the use of empirical data.

Monitoring Protocols—Monitoring would be conducted before, during, and after pile driving activities. In addition, observers shall record all incidents of marine mammal occurrence, regardless of distance from activity, and shall document any behavioral reactions in concert with distance from piles being driven. Observations made outside the shutdown zone will not result in shutdown; that pile segment would be completed without cessation, unless the animal approaches or enters the shutdown zone, at which point all pile driving activities would be halted. Monitoring will take place from fifteen minutes prior to initiation through thirty minutes post-completion of pile driving activities. Pile driving activities include the time to remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than thirty minutes. Please see the Acoustic and Marine Species Monitoring Plan (available at *www.nmfs.noaa.gov/pr/permits/incidental.htm*) for full details of the monitoring protocols.

The following additional measures apply to visual monitoring:

(1) Monitoring will be conducted by qualified observers, who will be placed at the best vantage point(s) practicable (as defined in the Marine Mammal Monitoring Plan) to monitor for marine mammals and implement shutdown/delay procedures when applicable by calling for the shutdown to the hammer operator. Qualified observers are trained biologists, with the following minimum qualifications:

- Visual acuity in both eyes (correction is permissible) sufficient for discernment of moving targets at the water's surface with ability to estimate target size and distance; use of binoculars may be necessary to correctly identify the target;
- Advanced education in biological science or related field (undergraduate degree or higher is required);
- Experience and ability to conduct field observations and collect data according to assigned protocols (this may include academic experience);
- Experience or training in the field identification of marine mammals, including the identification of behaviors;
- Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;
- Writing skills sufficient to prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates and times when in-water construction activities were suspended to avoid potential incidental injury from construction sound of marine mammals observed within a defined shutdown

zone; and marine mammal behavior; and

• Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

(2) Prior to the start of pile driving activity, the shutdown zone will be monitored for fifteen minutes to ensure that it is clear of marine mammals. Pile driving will only commence once observers have declared the shutdown zone clear of marine mammals; animals will be allowed to remain in the shutdown zone (i.e., must leave of their own volition) and their behavior will be monitored and documented. The shutdown zone may only be declared clear, and pile driving started, when the entire shutdown zone is visible (i.e., when not obscured by dark, rain, fog, etc.). In addition, if such conditions should arise during impact pile driving that is already underway, the activity would be halted.

(3) If a marine mammal approaches or enters the shutdown zone during the course of pile driving operations, activity will be halted and delayed until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or fifteen minutes have passed without re-detection of the animal. Monitoring will be conducted throughout the time required to drive a pile.

Sound Attenuation Devices

The use of bubble curtains to reduce underwater sound from impact pile driving was considered prior to the start of the project but was determined to not be practicable. Use of a bubble curtain in a channel with substantial current may not be effective, as unconfined bubbles are likely to be swept away and confined curtain systems may be difficult to deploy effectively in high currents. Data gathered during monitoring of construction on the San Francisco-Oakland Bay Bridge indicated that no reduction in the overall linear sound level resulted from use of a bubble curtain in deep water with relatively strong current, and the distance to the 190 dB zone was considered to be the same with and without the bubble curtain (Illingworth & Rodkin, 2001). During project monitoring for pile driving associated with the Richmond-San Rafael Bridge, also in San Francisco Bay, it was observed that performance in moderate current was significantly reduced (Oestman *et al.,* 2009). Lucke *et al.* (2011) also note that the effectiveness of most currently used curtain designs may be compromised in stronger currents and greater water depths. We believe that conditions (relatively deep water and strong tidal currents of up to 3 kn) at the project site would disperse the bubbles and compromise the effectiveness of sound attenuation.

Timing Restrictions

In-order to avoid impacts to least tern populations when they are most likely to be foraging and nesting, in-water work will be concentrated from October 1–March 31. However, this limitation is in accordance with agreements between the Navy and FWS, and is not a requirement of this proposed IHA. All in-water construction activities would occur only during daylight hours (sunrise to sunset).

Soft-Start

The use of a soft start procedure is believed to provide additional protection to marine mammals by warning or providing a chance to leave the area prior to the hammer operating at full capacity, and typically involves a requirement to initiate sound from the hammer at reduced energy followed by a waiting period. This procedure is repeated two additional times. It is difficult to specify the reduction in energy for any given hammer because of variation across drivers and, for impact hammers, the actual number of strikes at reduced energy will vary because operating the hammer at less than full power results in ''bouncing'' of the hammer as it strikes the pile, resulting in multiple ''strikes.'' The project will utilize soft start techniques for both impact and vibratory pile driving. We require the Navy to initiate sound from vibratory hammers for fifteen seconds at reduced energy followed by a thirty-second waiting period, with the procedure repeated two additional times. For impact driving, we require an initial set of three strikes from the impact hammer at reduced energy, followed by a thirty-second waiting period, then two subsequent three strike sets. Soft start will be required at the beginning of each day's pile driving work and at any time following a cessation of pile driving of thirty minutes or longer (specific to either vibratory or impact driving).

We have carefully evaluated the Navy's proposed mitigation measures and considered their effectiveness in past implementation to preliminarily determine whether they are likely to effect the least practicable impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another: (1) The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals, (2) the proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and (3) the practicability of the measure for applicant implementation.

Any mitigation measure(s) we prescribe should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

(1) Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).

(2) A reduction in the number (total number or number at biologically important time or location) of individual marine mammals exposed to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing takes by behavioral harassment only).

(3) A reduction in the number (total number or number at biologically important time or location) of times any individual marine mammal would be exposed to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing takes by behavioral harassment only).

(4) A reduction in the intensity of exposure to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing the severity of behavioral harassment only).

(5) Avoidance or minimization of adverse effects to marine mammal habitat, paying particular attention to the prey base, blockage or limitation of passage to or from biologically important areas, permanent destruction of habitat, or temporary disturbance of habitat during a biologically important time.

(6) For monitoring directly related to mitigation, an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on our evaluation of the Navy's proposed measures, as well as any other potential measures that may be relevant to the specified activity, we have preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable impact on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

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

Any monitoring requirement we prescribe should improve our understanding of one or more of the following:

- Occurrence of marine mammal species in action area (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 responses to acute stressors, or impacts of chronic exposures (behavioral or physiological).
- How anticipated responses to stressors impact either: (1) Long-term fitness and survival of an individual; or (2) Population, species, or stock.
- Effects on marine mammal habitat and resultant impacts to marine mammals.
- Mitigation and monitoring effectiveness.

Please see the Acoustic and Marine Species Monitoring Plan (available at *www.nmfs.noaa.gov/pr/permits/incidental.htm*) for full details of the requirements for monitoring and reporting. Notional monitoring locations (for biological and acoustic monitoring) are shown in Figure 3–1 of the Plan. The purpose of this Plan is to provide protocols for acoustic and marine mammal monitoring implemented during pile driving and removal activities associated with the completion of the IPP, as well as the initial production phase of the fuel pier replacement. We have preliminarily determined this monitoring plan, which is summarized here and which largely follows the monitoring strategies required and successfully implemented under the first-year IHA, to be sufficient to meet the MMPA's monitoring and reporting requirements. The previous monitoring plan was modified to integrate adaptive changes to the monitoring methodologies as well as updates to the scheduled construction activities. Monitoring objectives are as follows:

- Monitor in-water construction activities: (1) Implement in-situ acoustic monitoring efforts to continue to measure SPLs from in-water construction activities not previously monitored or validated during the previous IHA; (2) collect and evaluate acoustic sound levels for ten percent of the pile driving activities conducted along the outboard section of the fuel pier sufficient to confirm measured contours associated with the acoustic ZOIs; (3) collect acoustic sound recordings sufficient to document sound source levels for vibratory and pneumatic chipping activities for the first ten percent of the proposed piles to be removed along the outboard section.
- Monitor marine mammal occurrence and behavior during in-water construction activities to minimize marine mammal impacts and effectively document marine mammals occurring within ZOI boundaries.
- Continue the collection of ambient underwater sound measurements in the absence of project activities to develop a rigorous baseline for the project area.

Acoustic Measurements

The primary purpose of acoustic monitoring is to empirically verify modeled injury and behavioral disturbance zones (defined at radial distances to NMFS-specified thresholds of 160-, 180-, and 190-dB (rms) for underwater sound (where applicable) and 90- and 100-dB (unweighted) for airborne sound; see ''Estimated Take by Incidental Harassment'' below). For non-pulsed sound, distances will be determined for attenuation to the point at which sound becomes indistinguishable from background levels. Empirical acoustic monitoring data will be used to document transmission loss values determined from measurements collected during the IPP and examine site-specific differences in SPL and affected ZOIs on an as needed basis.

Should monitoring results indicate it is appropriate to do so, marine mammal mitigation zones would be revised as necessary to encompass actual ZOIs in subsequent years of the fuel pier replacement project. Acoustic monitoring will be conducted as specified in the approved Acoustic and Marine Species Monitoring Plan. Please see Table 2–2 of the Plan for a list of equipment to be used during acoustic monitoring.

Some details of the methodology include:

- Hydroacoustic monitoring for vibratory and impact driving of steel piles in areas bayward of the existing fuel pier will occur during the first ten percent of all pile driving events in order to document SPLs at the measured distances to the injury isopleths. In conjunction with measurements of SPLs at the source (10 m) and shutdown (approximately 300 m, or intermediate of the pinniped and cetacean shutdown ZOIs) monitoring locations, there will also be intermittent verification of the disturbance ZOIs throughout pile driving. Of the ten percent of pile driving events acoustically measured, one hundred percent of the data will be analyzed. The resulting data set will be analyzed to examine and confirm SPLs and rates of transmission loss for each separate in-water construction activity. The Navy will also conduct acoustic monitoring for pile removal activities that utilize equipment and/or methods not previously evaluated (e.g., vibratory removal and pneumatic chipping).
- For underwater recordings, sound level meter systems will follow methods in accordance with NMFS' 2012 guidance for the collection of source levels.
- For airborne recordings, to the extent that logistics and security allow, reference recordings will be collected at approximately 15 m from the source via a sound meter with integrated microphone. Other distances may also be utilized to obtain better data if the signal cannot be isolated clearly due to other sound sources (e.g., barges or generators).
- Hydrophones will be placed using a static line deployed from a stationary (temporarily moored) vessel. Locations of acoustic recordings will be collected via GPS. A depth sounder and/or weighted tape measure will be used to determine the depth of the water. The hydrophone will be attached to a weighted nylon cord to maintain a constant depth.
- Each hydrophone (underwater) and microphone (airborne) will be calibrated at the start of the monitoring time frame and applicable systems will be checked at the beginning of each day of monitoring activity.
- For each monitored location, a hydrophone will be deployed at mid-depth in order to evaluate site specific attenuation and propagation characteristics.

• In order to determining the area encompassed by the relevant isopleths for marine mammals, hydrophones will collect data at various distances from the source to accurately capture deviations in the pressure levels as well as examine geospatial differences in the spreading loss model caused by physical conditions and bathymetric properties throughout the sound field.

• Ambient conditions, both airborne and underwater, will be measured at the project site in the absence of construction activities to determine background sound levels. Ambient levels will be recorded over the frequency range from 7 Hz to 20 kHz. Ambient conditions will be recorded at least three times during the IHA period consistent with NMFS' 2012 guidance for the measurement of ambient sound. Each time, data will be collected for eight-hour periods for three days during typical working hours (7:00 a.m. to 4:00 p.m., Monday through Friday) in the absence of in-water construction activities. The three recording periods will be spaced to adequately capture variation across the notional work window (October–March).

• Underwater SPLs would be measured at the source and at the shutdown ZOIs for the entire duration of each recoded event. The SPLs will be monitored in real time by observing the LZ_{eq} (1 sec) expressed in dB during each pile driving event. Acoustic data recordings will be post-processed to determine maximum rms SPLs. Sound levels will be measured in Pascals (a unit of pressure), which are easily converted to dB.

• Airborne levels would be recorded as unweighted in dB and the distance to marine mammal behavioral disturbance thresholds would be calculated.

• Environmental data would be collected including but not limited to: Wind speed and direction, air temperature, humidity, surface water temperature, water depth, wave height, weather conditions and other factors that could contribute to influencing the airborne and underwater sound levels (e.g., aircraft, boats).

• The monitoring coordinator will supply the acoustics specialist with the substrate composition, hammer model and size, hammer energy settings and any changes to those settings during the piles being monitored, depth of the pile being driven, and blows per foot for the piles monitored.

• For acoustically monitored piles, data from the continuous monitoring locations (10 m and ~300 m from source) will be post-processed to obtain the maximum peak pressure level recorded for all the strikes associated with each pile, expressed in dB. This maximum value will originate from the phase of pile driving during which hammer energy was also at maximum (referred to as Level 4).

• From all the strikes associated with each pile occurring during the Level 4 phase these additional measures will be made:

○ Mean, minimum, and maximum rms pressure level in dB

○ mean duration of a pile strike (based on the ninety percent energy criterion)

○ number of hammer strikes

○ mean, minimum, and maximum single strike Sound Exposure Level (SEL) in [dB re μPa^2 sec]

○ cumulative SEL as defined by the mean single strike SEL + 10*log (# hammer strikes) in [dB re μPa^2 sec]

○ A frequency spectrum (pressure spectral density) in [dB re μPa^2 per Hz] based on the average of up to eight successive strikes with similar sound. Spectral resolution will be 1 Hz and the spectrum will cover nominal range from 7 Hz to 20 kHz.

Visual Marine Mammal Observations

The Navy will collect sighting data and behavioral responses to construction for marine mammal species observed in the region of activity during the period of activity. All observers will be trained in marine mammal identification and behaviors and are required to have no other construction-related tasks while conducting monitoring. The Navy will monitor the shutdown zone and disturbance zone before, during, and after pile driving as described under ''Proposed Mitigation'' and in the Acoustic and Marine Species Monitoring Plan, with observers located at the best practicable vantage points. Notional monitoring locations are shown in Figures 3–1 of the Navy's Plan. Please see that plan, available at *www.nmfs.noaa.gov/pr/permits/incidental.htm,* for full details of the required marine mammal monitoring. Based on our requirements, the Navy would implement the following procedures for pile driving:

• MMOs would be located at the best vantage point(s) in order to properly see the entire shutdown zone and as much of the disturbance zone as possible.

• During all observation periods, observers will use binoculars and the naked eye to search continuously for marine mammals.

• If the shutdown zones are obscured by fog or poor lighting conditions, pile driving at that location will not be initiated until that zone is visible. Should such conditions arise while impact driving is underway, the activity would be halted.

• The shutdown and disturbance zones around the pile will be monitored for the presence of marine mammals before, during, and after any pile driving or removal activity.

One MMO will be placed on the active pile driving rig in order to observe the respective shutdown zones for vibratory and impact pile driving. Monitoring would be primarily dedicated to observing the shutdown zone; however, MMOs would record all marine mammal sightings beyond these distances provided it did not interfere with their effectiveness at carrying out the shutdown procedures. Additionally, three to seven land, pier, or vessel-based MMOs will be positioned to monitor the shutdown zones and the buffer zones (one to the northeast and one to the south at the mouth of San Diego Bay). Because there are different threshold distances for different types of marine mammals (pinniped and cetacean), the observation platform at the shutdown zone will concentrate on the 190 dB rms and 180 dB rms isopleths locations and station the observers and vessels accordingly. The MMOs associated with these platforms will record all visible marine mammal sightings. Confirmed takes will be registered once the sightings data has been overlaid with the isopleths identified in Table 7 and visualized in Figure 6–2 of the Navy's application, or based on refined acoustic data, if amendments to the ZOIs are needed. The acousticians on board will be noting SPLs in real-time, but, to avoid biasing the observations, will not communicate that information directly to the MMOs. These platforms may move closer to, or farther from, the source depending on whether received SPLs are less than or greater than the regulatory threshold values. All MMOs will be in radio communication with each other so that the MMOs will know when to anticipate incoming marine mammal species and when they are tracking the same animals observed elsewhere.

Individuals implementing the monitoring protocol will assess its effectiveness using an adaptive approach. Monitoring biologists will use their best professional judgment throughout implementation and seek improvements to these methods when deemed appropriate. Any modifications to protocol will be coordinated between NMFS and the Navy.

Data Collection

We require that observers use approved data forms. Among other pieces of information, the Navy will

record detailed information about any implementation of shutdowns, including the distance of animals to the pile and description of specific actions that ensued and resulting behavior of the animal, if any. In addition, the Navy will attempt to distinguish between the number of individual animals taken and the number of incidents of take. We require that, at a minimum, the following information be collected on the sighting forms:

- Date and time that monitored activity begins or ends;
- Construction activities occurring during each observation period;
- Weather parameters (e.g., percent cover, visibility);
- Water conditions (e.g., sea state, tide state);
- Species, numbers, and, if possible, sex and age class of marine mammals;
- Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity, and if possible, the correlation to measured SPLs;
- Distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;
- Description of implementation of mitigation measures (e.g., shutdown or delay);
- Locations of all marine mammal observations; and
- Other human activity in the area.

In addition, photographs would be taken of any gray whales observed. These photographs would be submitted to NMFS' West Coast Regional Office for comparison with photo-identification catalogs to determine whether the whale is a member of the WNP population.

Reporting

A draft report would be submitted to NMFS within 45 calendar days of the completion of marine mammal monitoring, or sixty days prior to the issuance of any subsequent IHA for this project, whichever comes first. The report will include marine mammal observations pre-activity, during-activity, and post-activity during pile driving days, and will also provide descriptions of any behavioral responses to construction activities by marine mammals and a complete description of all mitigation shutdowns and the results of those actions. A final report would be prepared and submitted within thirty days following resolution of comments on the draft report. Required contents of the monitoring reports are described in more detail in the Navy's Acoustic and Marine Species Monitoring Plan.

Monitoring Results From Previously Authorized Activities

The Navy complied with the mitigation and monitoring required under the previous authorization for this project. Acoustic and marine mammal monitoring was implemented as required, with marine mammal monitoring occurring before, during, and after each pile driving event. During the course of these activities, the Navy did not exceed the take levels authorized under the IHA. However, the Navy did record one observation of a California sea lion within the defined 190-dB shutdown zone (see below for further discussion).

The objectives of the monitoring plan were largely similar to those described above for the year two monitoring plan. For acoustic monitoring, the primary goal was to validate the acoustic ZOI contours utilizing hydroacoustic measurements collected during the IPP to update estimated SPL contours (isopleths) developed from the transmission loss modeling effort conducted prior to the start of the project and to collect more data to validate the transmission loss model. In addition, acoustic monitoring was conducted for pile driving of concrete piles associated with the temporary relocation of the Navy's Marine Mammal Program (see ''Description of Work Accomplished'').

Acoustic Monitoring Results—For a full description of acoustic monitoring methodology, please see section 2.1.2 of the Navy's monitoring report, including Figure 2–1 for representative monitoring locations. Results are displayed in Table 4.

For acoustic monitoring associated with the marine mammal relocation at NMAWC, a continuous hydroacoustic monitoring system was positioned at source (10 m from the pile being installed or removed) and at the edge of the predicted outer limit of the 160-dB behavioral ZOI for impact driving of concrete piles, which was estimated to be approximately 74 m. Hydrophones were deployed from the dock, barge, or moored vessel at half the water depth measured by a weighed measuring tape or calibrated depth sounder. The depth in which pile driving took place ranged between 2.4 and 4.7 m. SPLs measured at the far-field varied in distance from 25 to 400 m from the installed pile to determine variations in transmission loss for individual piles and sites. Airborne sound was collected at 15.2 m and also at distances ranging from 30.5 to 122 m using SLMs mounted on tripods at 1.5 m elevation above the dock. Airborne sound measurements were collected intermittently, but in sufficient amounts to determine airborne ZOIs for pinniped species.

For monitoring associated with the IPP at the fuel pier site, hydroacoustic monitoring systems recorded underwater sound levels from piers, barges, or anchored vessels at source (10 m), shutdown (125 to 300 m), and at the predicted far-field behavioral threshold ZOI locations. Pile driving water depth was <4.7 m for piles driven on the shore side of the pier and ranged from 12–17 m for piles driven on the bay side of the pier. The far-field locations were located near Harbor Island to the northeast and adjacent to the Zuniga Jetty to the southeast (offshore) approximately 1,500 to 4,000 m from source from the pile driving activities. For vibratory driving, differences in average SPLs between pile locations (inside versus outside) was approximately 5 dB rms less for same-sized inside piles, and average maximum SPLs recorded for the nine individual piles monitored varied approximately 5 dB rms among all piles with no measurable differences between pile sizes. For impact driving, 36-in piles produced on average approximately 5 dB rms louder SPLs than did 30-in piles. Measured zones for impact driving were smaller for same-sized inside piles due to increased attenuation in shallower water and increased acoustic interference from existing piles. Airborne sound level recordings were collected at 15.2 m and at distances ranging from 93 to 400 m, following the methodology described above.

Maximum and average hydroacoustic dB rms SPLs for concrete piles were approximately 6 to 10 dB rms greater than levels reported for similar piles and methods elsewhere (e.g., Oestman *et al.,* 2009). The NMAWC project site was relatively shallow at 2–4 m depth, and acoustic boundary conditions created by construction barges, existing marina structures, and the narrow width of the channel likely contributed to variability in acoustic sound level recording results. During the IPP, measured SPLs for driving of 30- and 36-in steel pipe piles fell outside of expected levels. SPLs for impact and vibratory driving of 48-in steel pipe piles and were reported to be 195 and 190 dB rms at source (10 m), respectively (Oestman *et al.,* 2009). Hydroacoustic sound level recordings collected and analyzed during the IPP for vibratory and impact pile driving recorded lower than expected values for vibratory pile driving (approximately 170 dB rms) for both 30- and 36-in steel pipe piles and greater than expected (approximately 202 dB rms) values for

impact pile driving. For further discussion of these results, please see the Navy's monitoring report.

TABLE 4—ACOUSTIC MONITORING RESULTS

Location	Activity	Pile type	Number of piles measured	Average underwater SPL at 10 m (dB rms)	Average airborne SPL at 15 m (LZF_{max})	Measured distances to relevant zones (dB rms/dB unweighted) (m) [1]					
						120	160	180	190	90	100
NMAWC	Impact ...	12- and 16-in concrete	58	182	108	n/a	126	13	<10	728	105
IPP	Vibratory	30- and 36-in steel pipe	9	167	113	[2] 3,000	n/a	<10	<10	233	71
IPP	Impact ...	30-in steel pipe	2	195	.....	n/a	[3] 2,500	[3] 450	[3] 75		
IPP	Impact ...	36-in steel pipe	7	200							

[1] Site-specific measured transmission loss values (both underwater and airborne) were used to calculate zone distances. See monitoring report for more detail.

[2] The 120-dB disturbance zone was initially modeled to be 6,470 m; however, ambient sound in the vicinity of the project site was measured at approximately 128 dB rms (see below). This value was used in conjunction with a site-specific propagation model to arrive at a predicted distance of 3,000 m at which sound should attenuate to background levels. This was supported by collection of measured dB rms values for vibratory pile driving during the IPP, as signal could not be distinguished from background at similar distance.

[3] These values are for outside piles. Measured distances to the 160/180/190 dB ZOIs for inside piles were 2,000/100/40 m (see above for discussion). Zones calculated on the basis of SPLs from 36-in piles.

Ambient data collection was conducted in a manner consistent with NMFS' 2012 guidance for measurement of background sound. Ambient underwater and airborne sound level recordings were collected for three eight-hour days at NMAWC between March 20–27, 2014, and for the IPP from April 24 to May 23, 2014. Ambient sound level recordings were collected in the absence of construction activities, and during typical construction time periods (7 a.m. to 4 p.m.), at locations that were between 400 and 1,000 m from each site. Sites were chosen to minimize boat traffic effects that might impact results.

Ambient hydroacoustic sound level recordings conducted adjacent to the fuel pier IPP project site during the week prior to and following IPP pile driving activities documented daily LZF averages of approximately 128 dB (see Figure 3–20 of the monitoring report). The area adjacent to the project site is a high traffic area supporting Navy fuel operations and is within 500 m of the main San Diego Bay navigation channel. Spike measurements eclipsed 140 dB with one instance reaching near 155 dB (Figure 3–20). Values were consistent with previous measured values and were recorded within expected ranges.

Marine Mammal Monitoring Results—Marine mammal monitoring was conducted as required under the IHA and as described in the first-year monitoring plan and in our **Federal Register** notice of proposed authorization associated with the first-year IHA (78 FR 30873; May 23, 2013). For a full description of monitoring methodology, please see section 2.1.3 of the Navy's monitoring report, including Figure 2–1 for representative monitoring locations. Monitoring protocols were managed adaptively during the course of the first-year IHA. For example, as the IPP project progressed, the Navy realized that there were areas that were within close proximity to pile driving activities that could not be adequately observed by a single MMO, and a pier-based secondary MMO was added. As a result, three dock-, pier-, and barge-based MMOs (one in close proximity to the pile being driven, and two in close proximity to known haul out locations for seals and sea lions to the north and south of the pier) were used to provide complete coverage for the shutdown zones.

Monitoring results are presented in Table 5. The Navy recorded all observations of marine mammals, including pre- and post-construction monitoring efforts. Animals observed during these periods or that were determined to be outside relevant ZOIs were not considered to represent incidents of take. Please see Figures 3–8, 3–11, 3–22, 3–26, and 3–28 for locations of observations and incidents of take relative to the project sites. Take authorization for the first-year authorization was informed by an assumption that 66 days of in-water construction would occur, whereas only 35 total days actually occurred. However, the actual observed rates per day were in all cases lower than what was assumed. Therefore, we expect that the Navy would not have exceeded the take allowances even if the full 66 days had been reached.

As noted above, an individual California sea lion was observed within the defined 190-dB shutdown zone. After correcting for animal location based on distance and bearing relative to the observer, the distance from the animal to the pile was determined to be approximately 30 m. The barge location on that day may have impacted the observer's ability to judge distance relative to the pile. Although the sea lion was sighted relatively close to the shutdown zone, the MMO assumed that, since it was seen passing the 49×12 m barge, it was outside of the shutdown zone. The animal continued swimming and no behavioral changes were noted.

TABLE 5—MARINE MAMMAL MONITORING RESULTS

Species	Location	Total sightings	Total individuals	Total incidents of Level B take
California sea lion	NMAWC	24	25	1
	IPP	1,061	2,299	387
Harbor seal	NMAWC	6	6	1
	IPP	23	25	6
Bottlenose dolphin	NMAWC	1	1	0
	IPP	34	83	13
Gray whale [1]	IPP	1	1	0
Common dolphin [2]	IPP	3	19	0

[1] One large cetacean was observed just to the east of the Zuniga Jetty. It could not be positively identified but was likely a gray whale. See Figure 3–28 of the monitoring report.
[2] No take was authorized for common dolphins.

Estimated Take by Incidental Harassment

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].''

All anticipated takes would be by Level B harassment resulting from vibratory and impact pile driving or pneumatic chipping and involving temporary changes in behavior. The proposed mitigation and monitoring measures are expected to minimize the possibility of injurious or lethal takes such that take by Level A harassment, serious injury, or mortality is considered discountable. However, it is unlikely that injurious or lethal takes would occur even in the absence of the planned mitigation and monitoring measures.

If a marine mammal responds to a stimulus by changing its behavior (e.g., through relatively minor changes in locomotion direction/speed or vocalization behavior), the response may or may not constitute taking at the individual level, and is unlikely to affect the stock or the species as a whole. However, if a sound source displaces marine mammals from an important feeding or breeding area for a prolonged period, impacts on animals or on the stock or species could potentially be significant (e.g., Lusseau and Bejder, 2007; Weilgart, 2007). Given the many uncertainties in predicting the quantity and types of impacts of sound on marine mammals, it is common practice to estimate how many animals are likely to be present within a particular distance of a given activity, or exposed to a particular level of sound. This practice potentially overestimates the numbers of marine mammals taken. In addition, it is often difficult to distinguish between the individuals harassed and incidences of harassment. In particular, for stationary activities, it is more likely that some smaller number of individuals may accrue a number of incidences of harassment per individual than for each incidence to accrue to a new individual, especially if those individuals display some degree of residency or site fidelity and the impetus to use the site (e.g., because of foraging opportunities) is stronger than the deterrence presented by the harassing activity.

The project area is not believed to be particularly important habitat for marine mammals, nor is it considered an area frequented by marine mammals (with the exception of California sea lions, which are attracted to nearby haul-out opportunities). Sightings of other species are relatively rare. Therefore, behavioral disturbances that could result from anthropogenic sound associated with these activities are expected to affect only a relatively small number of individual marine mammals, although those effects could be recurring over the life of the project if the same individuals remain in the project vicinity.

The Navy has requested authorization for the potential taking of small numbers of California sea lions, harbor seals, bottlenose dolphins, common dolphins, and gray whales in San Diego Bay and nearby waters that may result from pile driving during construction activities associated with the fuel pier replacement project described previously in this document. In order to estimate the potential incidents of take that may occur incidental to the specified activity, we typically first estimate the extent of the sound field that may be produced by the activity and then consider in combination with information about marine mammal density or abundance in the project area. In this case, we have acoustic data from project monitoring that provides empirical information regarding the sound fields likely produced by project activities. We first provide information on applicable sound thresholds for determining effects to marine mammals before describing the measured sound fields, the available marine mammal density or abundance information, and the method of estimating potential incidents of take.

Sound Thresholds

We use generic sound exposure thresholds to determine when an activity that produces sound might result in impacts to a marine mammal such that a take by harassment might occur. To date, no studies have been conducted that explicitly examine impacts to marine mammals from pile driving sounds or from which empirical sound thresholds have been established. These thresholds (Table 6) are used to estimate when harassment may occur (i.e., when an animal is exposed to levels equal to or exceeding the relevant criterion) in specific contexts; however, useful contextual information that may inform our assessment of effects is typically lacking and we consider these thresholds as step functions. NMFS is working to revise these acoustic guidelines; for more information on that process, please visit *www.nmfs.noaa.gov/pr/acoustics/guidelines.htm*.

TABLE 6—CURRENT ACOUSTIC EXPOSURE CRITERIA

Criterion	Definition	Threshold
Level A harassment (underwater) ...	Injury (PTS—any level above that which is known to cause TTS).	180 dB (cetaceans)/190 dB (pinnipeds) (rms).
Level B harassment (underwater) ...	Behavioral disruption	160 dB (impulsive source)/120 dB (continuous source) (rms).
Level B harassment (airborne)	Behavioral disruption	90 dB (harbor seals)/100 dB (other pinnipeds) (unweighted).

Distance to Sound Thresholds

Background information on underwater sound propagation and the calculation of range to relevant thresholds was provided in our **Federal Register** notice of proposed authorization associated with the first-year IHA (78 FR 30873; May 23, 2013). For the first-year IHA, the Navy estimated sound fields using a site-specific model for transmission loss (TL) from pile driving at a central point at the project site in combination with proxy source levels (as described in the aforementioned **Federal Register** notice). The model is based on historical temperature-salinity data and location-dependent bathymetry. In the model, TL is the same for different sound source levels and is applied to each of the different activities to determine the point at which the applicable thresholds are reached as a function of distance from the source. The model's predictions result in a slightly lower average rate of TL than practical spreading, and hence are conservative. The model has been further validated using acoustic monitoring data collected under the first-year IHA (see Figure 6–1 of the Navy's application).

Only impact and vibratory driving of steel pipe piles is planned for the next phase of work. Demolition activities, including vibratory pile removal and pneumatic chipping, are also planned but would always occur concurrently with impact and vibratory driving and the resulting sound fields would be subsumed by those activities. Acoustic monitoring results that inform both the take estimates as well as the mitigation monitoring zones were reported in Table 4. We present the measured distances again here (Table 7) and compare to the modeled zones used in estimating potential incidents of take for the first year IHA. See also Figure 6–2 of the Navy's application for visual representation of these sound fields and their interaction with local topography. Assumed proxy source levels for the first-year IHA were 195 dB rms and 180 dB rms for impact and vibratory driving of steel piles, respectively. Measured source levels, used to produce the values labeled as ''measured'' below, were 200 dB rms and 170 dB rms for impact and vibratory driving, respectively. For impact driving, distances to the 160/180/190-dB ZOIs are 5,484, 452, and 36 m. For vibratory driving, background sound has been determined to be approximately 128 dB rms. The distance at which continuous sound produced by vibratory driving would attenuate to background levels is approximately 3,000 m. For airborne sound, we assume a single, precautionary zone here that is based on measured values for impact driving (approximately 110 dB [unweighted]).

TABLE 7—PREDICTED VERSUS MEASURED DISTANCES TO RELEVANT THRESHOLDS

Activity	Distance to threshold in meters					
	190 dB	180 dB	160 dB	120 dB	100 dB	90 dB
Impact driving, steel piles (predicted)	36	452	5,484	n/a	113	358
Impact driving, steel piles (measured) [1]	75	450	2,500	n/a	71	233
Vibratory driving, steel piles (predicted)	<10	14	n/a	6,470	9	28
Vibratory driving, steel piles (measured)	<10	<10	n/a	3,000	n/a	n/a

[1] Note that these values are based on data for bayside piles and will be precautionary for shoreside piles. See discussion at Table 4.

Airborne Sound

Although sea lions are known to haul-out regularly on man-made objects in the vicinity of the project site (see Figure 4–1 of the Navy's application), and harbor seals are occasionally observed hauled out on rocks along the shoreline in the vicinity of the project site, none of these are within the ZOIs for airborne sound, and we believe that incidents of incidental take resulting solely from airborne sound are unlikely. The zones for sea lions are within the minimum shutdown zone defined for underwater sound and, although the zones for harbor seals are larger, they have not been observed to haul out as readily on man-made structure in the immediate vicinity of the project site. There is a remote possibility that an animal could surface in-water, but with head out, within one of the defined zones and thereby be exposed to levels of airborne sound that we associate with harassment, but any such occurrence would likely be accounted for in our estimation of incidental take from underwater sound.

In summary, we generally recognize that pinnipeds occurring within an estimated airborne harassment zone, whether in the water or hauled out, could be exposed to airborne sound that may result in behavioral harassment. However, any animal exposed to airborne sound above the behavioral harassment threshold is likely to also be exposed to underwater sound above relevant thresholds (which are typically in all cases larger zones than those associated with airborne sound). Thus, the behavioral harassment of these animals is already accounted for in these estimates of potential take. Multiple incidents of exposure to sound above NMFS' thresholds for behavioral harassment are not believed to result in increased behavioral disturbance, in either nature or intensity of disturbance reaction. Therefore, we do not believe that authorization of incidental take resulting from airborne sound for pinnipeds is warranted, and airborne sound is not discussed further here.

Marine Mammal Densities

For all species, the best scientific information available was considered for use in the marine mammal take assessment calculations. Although various regional offshore surveys for marine mammals have been conducted, it is unlikely that these data would be

representative of the species or numbers that may be encountered in San Diego Bay. However, the Navy has conducted a large number of site-specific marine mammal surveys, from 2007–14 (Merkel and Associates, 2008; Johnson, 2010, 2011; Lerma, 2012, 2014). Whereas analyses for the previous IHA relied on surveys conducted from 2007–12, continuing surveys by the Navy have generally indicated increasing abundance of all species. Accordingly, we use here data from surveys of the project area that were conducted between September 2012 and April 2014 in order to provide the most up-to-date estimates for marine mammal abundances during the period of this proposed IHA. These data are from dedicated line-transect surveys, or from opportunistic observations for more rarely observed species (see Figures 3–1 and 3–2 of the Navy's application). Boat survey transects established within northern San Diego Bay in 2007 have been resurveyed on 46 occasions, 35 of which were conducted between September and April. Observational data from the most recent 22 of these surveys inform this analysis.

In addition, the Navy has developed estimates of marine mammal densities in waters associated with training and testing areas (including Hawaii-Southern California) for the Navy Marine Species Density Database (NMSDD). A technical report (Hanser *et al.,* 2014) describes methodologies and available information used to derive these densities, which are based upon the best available information, except where specific local abundance information is available and applicable to a specific action area. Density information is shown in Table 8; the document is publicly available on the Internet at: *nwtteis.com/DocumentsandReferences/NWTTDocuments/SupportingTechnicalDocuments.aspx* (accessed August 26, 2014).

Description of Take Calculation

The following assumptions are made when estimating potential incidences of take:

- All marine mammal individuals potentially available are assumed to be present within the relevant area, and thus incidentally taken;
- An individual can only be taken once during a 24-h period;
- There were will be 135 total days of activity;
- The maximum ZOI is approximately 5.7 km^2;
- Vibratory and impact driving of steel pipe piles will occur on each day; and,
- Exposures to sound levels at or above the relevant thresholds equate to take, as defined by the MMPA.

The estimation of marine mammal takes typically uses the following calculation:

Exposure estimate = (n * ZOI) * days of total activity

where:

n = density estimate used for each species/season

ZOI = sound threshold ZOI area; the area encompassed by all locations where the SPLs equal or exceed the threshold being evaluated

n * ZOI produces an estimate of the abundance of animals that could be present in the area for exposure, and is rounded to the nearest whole number before multiplying by days of total activity.

The ZOI impact area is estimated using the relevant distances in Table 7, assuming that sound radiates from a central point in the water column slightly offshore of the existing pier and taking into consideration the possible affected area due to topographical constraints of the action area (i.e., radial distances to thresholds are not always reached). When local abundance is the best available information, in lieu of the density-area method described above, we may simply multiply some number of animals (as determined through counts of animals hauled-out) by the number of days of activity, under the assumption that all of those animals will be present and incidentally taken on each day of activity.

Where appropriate, we use average daily number of individuals observed within the project area (defined as the 120-dB ZOI for potential behavioral disturbance by vibratory pile driving calculated without consideration for background sound levels) during Navy marine mammal surveys, corrected to allow for a five percent contingency. It is the opinion of the professional biologists who conducted these surveys that detectability of animals during these surveys, at slow speeds and under calm weather and excellent viewing conditions, approached one hundred percent. However, to account for the possibility that some parts of the study area may not have been covered due to access limitations, and to allow for variation in the accuracy of counts of large numbers of animals, a 95 percent detection rate is assumed (equivalent to five percent precautionary contingency allowance).

There are a number of reasons why estimates of potential incidents of take may be conservative, assuming that available density or abundance estimates and estimated ZOI areas are accurate (aside from the contingency correction discussed above). We assume, in the absence of information supporting a more refined conclusion, that the output of the calculation represents the number of individuals that may be taken by the specified activity. In fact, in the context of stationary activities such as pile driving and in areas where resident animals may be present, this number more realistically represents the number of incidents of take that may accrue to a smaller number of individuals. While pile driving can occur any day throughout the period of validity, and the analysis is conducted on a per day basis, only a fraction of that time (typically a matter of hours on any given day) is actually spent pile driving. The potential effectiveness of mitigation measures in reducing the number of takes is typically not quantified in the take estimation process. For these reasons, these take estimates may be conservative. See Table 8 for total estimated incidents of take.

California Sea Lion

The NMSDD reports estimated densities for north and central San Diego Bay of 5.8 animals/km^2 for the summer and fall periods and 2.5 animals/km^2 during the winter and spring (based on surveys conducted 2007–11). For the first-year IHA, the Navy reported an average abundance of approximately sixty individuals per survey day (approximately equating to the reported density). However, when considering only more recent Navy vessel-based surveys (22 surveys between September 2012 and April 2014), an average of 175 individuals (adjusted for 95 percent detection as described above) has been observed within the maximum ZOI for the project during the seasonal period of in-water construction. This includes both hauled-out and swimming individuals. For California sea lions, the most common species in northern San Diego Bay and the only species with regular occurrence in the project area, we determined that this value—derived from more recent site-specific surveys—would be most appropriate for use in estimating potential incidences of take.

Harbor Seal

Harbor seals are relatively uncommon within San Diego Bay. Previously, sightings in the Navy transect surveys of northern San Diego Bay were limited to individuals outside of the ZOI, on the south side of Ballast Point. These individuals had not been observed entering or transiting the project area and were believed to move from this

location to haul-outs further north at La Jolla. Separately, marine mammal monitoring conducted by the Navy intermittently from 2010–14 had documented up to four harbor seals near Pier 122 (within the ZOI) at various times, with the greatest number of sightings during April and May. This information was used in the previous IHA analysis, wherein we assumed that three harbor seals could be present for up to thirty days of the project. However, more recent data from Navy transect surveys (September 2012 through April 2014) indicate an average abundance of 6.17 within the maximum project ZOI (adjusted for 95 percent detection to an average of seven individuals). Animals were seen swimming as well as hauled out on rocks along the shoreline of NBPL. Although it is unknown whether this increase in abundance is a temporary phenomenon we use this new information on a precautionary basis as the best available information, and assume that this number of animals could be present on any day of the project. The NMSDD provides a maximum density estimate of 0.02 animals/km^2 for southern California, but recent, site-specific information indicates that harbor seals are more common within the northern San Diego Bay project area than this density would suggest.

Gray Whale

The NMSDD provides a density of 0.1 animals/km^2 for southern California waters from shore to 5 nm west of the Channel Islands (winter/spring only; density assumed to be zero during summer/fall), a value initially reported by Carretta *et al.* (2000) for gray whales around San Clemente Island in the Southern California Bight. Gray whales were seen only from January-April. In the project area, observational data for gray whales is limited and their occurrence considered infrequent and unpredictable. On the basis of limited information—in recent years, solitary individuals have entered the bay and remained for varying lengths of time in 2009, 2010, 2011, and 2014, and whales more regularly transit briefly past the mouth of San Diego Bay—we assume here that the NMSDD density may be applicable throughout the migration period (December–April), while acknowledging that it likely represents a precautionary estimate for waters within the Bay as opposed to those outside the mouth of the bay that whales are more likely to transit through. In order to determine how many of the maximum 135 days of in-water pile driving work it is appropriate to assume the potential for gray whale presence, we consider in-water work days (five days per week) that overlap the main part of the migration season (approximately eighteen weeks), for a total of ninety days. Incidental harassment of gray whales could result from some combination of individuals briefly transiting near the mouth of the Bay and from individuals entering the bay and lingering in the project area.

Bottlenose Dolphin

Coastal bottlenose dolphins can occur at any time of year in San Diego Bay. Numbers sighted during Navy transect surveys have been highly variable, ranging from zero to forty individuals (observed dolphins are assumed to have been of the coastal stock). An uncorrected average of 2.1 bottlenose dolphins was observed during recent Navy surveys (September 2012 through April 2014), although nineteen animals were observed in a single survey. As reported in the NMSDD, Dudzik *et al.* (2006) provide a uniform density for California coastal dolphins of 0.4 animals/km^2 within 1 km of the coast from Baja to San Francisco in all four seasons. However, given the sporadic nature of bottlenose dolphin sightings (i.e., limited data) and the high variability observed in terms of numbers and locations, we believe it appropriate to take a precautionary approach to take estimation for bottlenose dolphins and assume that as many as three dolphins could occur per day of activity. We believe that this increase from the observed abundance is necessary and sufficient to account for the uncertainty described above.

Common Dolphin

Common dolphins are present in the coastal waters outside of San Diego Bay, but have been observed in the bay only infrequently and were never seen during the Navy's surveys. However, the previously described observations of common dolphins in the project area during the IPP in 2014 prompted their inclusion in this proposed IHA. There have not been enough sightings of common dolphins in San Diego Bay to develop a reliable estimate specific to the project area. Sightings of long-beaked common dolphins are predominantly near shore, and have been documented during Navy training exercises just offshore and to the south of San Diego Bay, whereas those of short-beaked common dolphins extend throughout the coastal and offshore waters. The NMSDD provides an all-season density estimate of 0.1 animals/km^2 for the long-beaked common dolphin within southern California waters (derived from Ferguson and Barlow [2003] and Barlow and Forney [2007]). Because short-beaked common dolphins are less common in nearshore waters than are long-beaked, and are expected to be less likely to occur in the project area, we assign the value for long-beaked common dolphins to all common dolphins that may occur in the project area. However, use of this density value would result in an assumption that no common dolphins would be incidentally taken by project activities. We believe it appropriate to take a precautionary approach and, on the basis of the common dolphin observations from previous project monitoring (i.e., three observations with average group size of six), assume that a group of six dolphins could potentially be present on each day of activity. These incidents of take could be of either long-beaked or short-beaked common dolphins.

TABLE 8—CALCULATIONS FOR INCIDENTAL TAKE ESTIMATION

Species	Abundance [1]	Total proposed authorized takes [3] (% of total stock)
California sea lion	175	23,625 (8.0)
Harbor seal	7	945 (3.1)
Bottlenose dolphin	3	405 (81.0) [4]
Common dolphin	6	810 (0.8 [LB]/0.2 [SB]) [5]
Gray whale	[2] 1	90 (0.5)

[1] Best available species- and season-specific density estimate were described above. With the exception of the gray whale (see footnote 2 below), we have determined that in all cases a site-specific abundance estimate is the most appropriate information to use in estimating take. See discussions above.

[2] Product of density (0.115 animals/km^2) and largest ZOI (5.7 km^2) rounded to nearest whole number.

[3] Best abundance numbers multiplied by expected days of activity (135) to produce take estimate. Calculation for gray whale assumes ninety days rather than 135; see discussion above.
[4] Total stock assumed to be 500 for purposes of calculation. See Table 3.
[5] LB = long-beaked; SB = short-beaked.

Analyses and Preliminary Determinations

Negligible Impact Analysis

NMFS has defined ''negligible impact'' in 50 CFR 216.103 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.'' 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 Level B harassment 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 behavioral harassment, we consider 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 the number and nature of estimated Level A harassment takes, the number of estimated mortalities, and effects on habitat.

Pile driving activities associated with the pier replacement project, as outlined previously, have the potential to disturb or displace marine mammals. Specifically, the specified activities may result in take, in the form of Level B harassment (behavioral disturbance) only, from underwater sounds generated from pile driving. Potential takes could occur if individuals of these species are present in the ensonified zone when pile driving is happening.

No injury, serious injury, or mortality is anticipated given the nature of the activity and measures designed to minimize the possibility of injury to marine mammals. The potential for these outcomes is minimized through the construction method and the implementation of the planned mitigation measures. Specifically, vibratory hammers will be the primary method of installation, and this activity does not have significant potential to cause injury to marine mammals due to the relatively low source levels produced (site-specific acoustic monitoring data show no source level measurements above 180 dB rms) and the lack of potentially injurious source characteristics. Impact pile driving produces short, sharp pulses with higher peak levels and much sharper rise time to reach those peaks. When impact driving is necessary, required measures (implementation of shutdown zones) significantly reduce any possibility of injury. Given sufficient ''notice'' through use of soft start (for impact driving), marine mammals are expected to move away from a sound source that is annoying prior to its becoming potentially injurious. The likelihood that marine mammal detection ability by trained observers is high under the environmental conditions described for San Diego Bay (approaching one hundred percent detection rate, as described by trained biologists conducting site-specific surveys) further enables the implementation of shutdowns to avoid injury, serious injury, or mortality.

Effects on individuals that are taken by Level B harassment, on the basis of reports in the literature as well as monitoring from other similar activities, will likely be limited to reactions such as increased swimming speeds, increased surfacing time, or decreased foraging (if such activity were occurring) (e.g., Thorson and Reyff, 2006; HDR, 2012; Lerma, 2014). Most likely, individuals will simply move away from the sound source and be temporarily displaced from the areas of pile driving, although even this reaction has been observed primarily only in association with impact pile driving. In response to vibratory driving, pinnipeds (which may become somewhat habituated to human activity in industrial or urban waterways) have been observed to orient towards and sometimes move towards the sound. The pile driving activities analyzed here are similar to, or less impactful than, numerous other construction activities conducted in San Francisco Bay and in the Puget Sound region, which have taken place with no reported injuries or mortality to marine mammals, and no known long-term adverse consequences from behavioral harassment. Repeated exposures of individuals to levels of sound that may cause Level B harassment are unlikely to result in hearing impairment or to significantly disrupt foraging behavior. Thus, even repeated Level B harassment of some small subset of the overall stock is unlikely to result in any significant realized decrease in fitness for the affected individuals, and thus would not result in any adverse impact to the stock as a whole. Level B harassment will be reduced to the level of least practicable impact through use of mitigation measures described herein and, if sound produced by project activities is sufficiently disturbing, animals are likely to simply avoid the project area while the activity is occurring.

In summary, this negligible impact analysis is founded on the following factors: (1) The possibility of injury, serious injury, or mortality may reasonably be considered discountable; (2) the anticipated incidents of Level B harassment consist of, at worst, temporary modifications in behavior; (3) the absence of any significant habitat within the project area, including rookeries, significant haul-outs, or known areas or features of special significance for foraging or reproduction; (4) the presumed efficacy of the proposed mitigation measures in reducing the effects of the specified activity to the level of least practicable impact. In addition, these stocks are not listed under the ESA or considered depleted under the MMPA. 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 activity will have only short-term effects on individuals. The specified activity is not expected to impact rates of recruitment or survival and will therefore not result in population-level impacts. 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, we preliminarily find that the total marine mammal take from Navy's pier replacement activities will have a negligible impact on the affected marine mammal species or stocks.

Small Numbers Analysis

The number of incidents of take proposed for authorization for these stocks, with the exception of the coastal bottlenose dolphin (see below), would be considered small relative to the relevant stocks or populations (see Table 8) even if each estimated taking occurred to a new individual. This is an extremely unlikely scenario as, for pinnipeds occurring at the NBPL waterfront, there will almost certainly be some overlap in individuals present day-to-day and in general, there is likely

to be some overlap in individuals present day-to-day for animals in estuarine/inland waters.

The proposed numbers of authorized take for bottlenose dolphins are higher relative to the total stock abundance estimate and would not represent small numbers if a significant portion of the take was for a new individual. However, these numbers represent the estimated incidents of take, not the number of individuals taken. That is, it is likely that a relatively small subset of California coastal bottlenose dolphins would be incidentally harassed by project activities. California coastal bottlenose dolphins range from San Francisco Bay to San Diego (and south into Mexico) and the specified activity would be stationary within an enclosed water body that is not recognized as an area of any special significance for coastal bottlenose dolphins (and is therefore not an area of dolphin aggregation, as evident in Navy observational records). We therefore believe that the estimated numbers of takes, were they to occur, likely represent repeated exposures of a much smaller number of bottlenose dolphins and that, based on the limited region of exposure in comparison with the known distribution of the coastal bottlenose dolphin, these estimated incidents of take represent small numbers of bottlenose dolphins.

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 mitigation and monitoring measures, we preliminarily find that small numbers of marine mammals will be taken relative to the populations of the affected species or stocks.

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by this action. Therefore, we have 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 (ESA)

The Navy initiated informal consultation under section 7 of the ESA with NMFS Southwest Regional Office (now West Coast Regional Office) on March 5, 2013. NMFS concluded on May 16, 2013, that the proposed action may affect, but is not likely to adversely affect, WNP gray whales. The Navy has not requested authorization of the incidental take of WNP gray whales and no such authorization is proposed, and there are no other ESA-listed marine mammals found in the action area. Therefore, no consultation under the ESA is required.

National Environmental Policy Act (NEPA)

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), as implemented by the regulations published by the Council on Environmental Quality (40 CFR parts 1500–1508), the Navy prepared an Environmental Assessment (EA) to consider the direct, indirect and cumulative effects to the human environment resulting from the pier replacement project. NMFS made the Navy's EA available to the public for review and comment, in relation to its suitability for adoption by NMFS in order to assess the impacts to the human environment of issuance of an IHA to the Navy. Also in compliance with NEPA and the CEQ regulations, as well as NOAA Administrative Order 216–6, NMFS has reviewed the Navy's EA, determined it to be sufficient, and adopted that EA and signed a Finding of No Significant Impact (FONSI) on July 8, 2013.

We have reviewed the Navy's application for a renewed IHA for ongoing construction activities for 2014–15 and the 2013–14 monitoring report. Based on that review, we have determined that the proposed action is very similar to that considered in the previous IHA. In addition, no significant new circumstances or information relevant to environmental concerns have been identified. Thus, we have determined preliminarily that the preparation of a new or supplemental NEPA document is not necessary, and will, after review of public comments determine whether or not to reaffirm our 2013 FONSI. The 2013 NEPA documents are available for review at *www.nmfs.noaa.gov/pr/permits/incidental.htm.*

Proposed Authorization

As a result of these preliminary determinations, we propose to issue an IHA to the Navy for conducting the described pier replacement activities in San Diego Bay, for a period of one year from the date of issuance, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The proposed IHA language is provided next.

This section contains a draft of the IHA itself. The wording contained in this section is proposed for inclusion in the IHA (if issued).

1. This Incidental Harassment Authorization (IHA) is valid for a period of one year from the date of issuance.

2. This IHA is valid only for pile driving and removal activities associated with the fuel pier replacement project in San Diego Bay, California.

3. General Conditions

(a) A copy of this IHA must be in the possession of the Navy, its designees, and work crew personnel operating under the authority of this IHA.

(b) The species authorized for taking are the harbor seal (*Phoca vitulina richardii*), California sea lion (*Zalophus californianus*), bottlenose dolphin (*Tursiops truncatus truncatus*), common dolphin (*Delphinus* sp.), and gray whale (*Eschrichtius robustus*).

(c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). See Table 1 (attached) for numbers of take authorized.

(d) The taking by injury (Level A harassment), serious injury, or death of any of the species listed in condition 3(b) of the Authorization or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.

(e) The Navy shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, acoustic monitoring team, and Navy staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

4. Mitigation Measures

The holder of this Authorization is required to implement the following mitigation measures:

(a) For all pile driving, the Navy shall implement a minimum shutdown zone of 10 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease. See Table 2 (attached) for minimum radial distances required for shutdown zones.

(b) The Navy shall similarly avoid direct interaction with marine mammals during in-water heavy machinery work other than pile driving that may occur in association with the specified activities. If a marine mammal comes within 10 m of such activity, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions, as appropriate.

(c) The Navy shall establish monitoring locations as described below. Please also refer to the Acoustic

and Marine Species Monitoring Plan (Monitoring Plan; attached).

i. For all pile driving activities, a minimum of one observer shall be stationed at the active pile driving rig in order to monitor the shutdown zones.

ii. For all pile driving activities, at least three additional vessel-based observers shall be positioned for optimal monitoring of the surrounding waters. During impact driving of steel piles, one of these shall be stationed for optimal monitoring of the cetacean Level A injury zone (see Table 2), while two of these may be positioned at the discretion of the Navy for optimal fulfillment of both acoustic monitoring objectives and monitoring of the Level B harassment zone. During all other pile driving, all three vessel-based observers may be positioned at the discretion of the Navy for optimal fulfillment of both acoustic monitoring objectives and monitoring of the Level B harassment zone.

iii. For all impact pile driving activities, a minimum of one shore-based observer shall be located at the pier work site.

iv. These observers shall record all observations of marine mammals, regardless of distance from the pile being driven, as well as behavior and potential behavioral reactions of the animals. Photographs must be taken of any observed gray whales.

v. All observers shall be equipped for communication of marine mammal observations amongst themselves and to other relevant personnel (e.g., those necessary to effect activity delay or shutdown).

(d) Monitoring shall take place from fifteen minutes prior to initiation of pile driving activity through thirty minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for fifteen minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (i.e., must leave of their own volition) and their behavior shall be monitored and documented. Monitoring shall occur throughout the time required to drive a pile. The shutdown zone must be determined to be clear during periods of good visibility (i.e., the entire shutdown zone and surrounding waters must be visible to the naked eye).

(e) If a marine mammal approaches or enters the shutdown zone, all pile driving activities at that location shall be halted. If pile driving is halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or fifteen minutes have passed without re-detection of the animal.

(f) Monitoring shall be conducted by qualified observers, as described in the Monitoring Plan. Trained observers shall be placed from the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.

(g) The Navy shall use soft start techniques recommended by NMFS for vibratory and impact pile driving. Soft start for vibratory drivers requires contractors to initiate sound for fifteen seconds at reduced energy followed by a thirty-second waiting period. This procedure is repeated two additional times. Soft start for impact drivers requires contractors to provide an initial set of strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy strike sets. Soft start shall be implemented at the start of each day's pile driving and at any time following cessation of pile driving for a period of thirty minutes or longer. Soft start for impact drivers must be implemented at any time following cessation of impact driving for a period of thirty minutes or longer.

(h) Pile driving shall only be conducted during daylight hours.

5. Monitoring

The holder of this Authorization is required to conduct marine mammal monitoring during pile driving activity. Marine mammal monitoring and reporting shall be conducted in accordance with the Monitoring Plan.

(a) The Navy shall collect sighting data and behavioral responses to pile driving for marine mammal species observed in the region of activity during the period of activity. All observers shall be trained in marine mammal identification and behaviors, and shall have no other construction-related tasks while conducting monitoring.

(b) For all marine mammal monitoring, the information shall be recorded as described in the Monitoring Plan.

(c) The Navy shall conduct acoustic monitoring for representative scenarios of pile driving activity, as described in the Monitoring Plan.

6. Reporting

The holder of this Authorization is required to:

(a) Submit a draft report on all monitoring conducted under the IHA within 45 calendar days of the completion of marine mammal and acoustic monitoring, or sixty days prior to the issuance of any subsequent IHA for this project, whichever comes first. A final report shall be prepared and submitted within thirty days following resolution of comments on the draft report from NMFS. This report must contain the informational elements described in the Monitoring Plan, at minimum (see attached), and shall also include:

i. Detailed information about any implementation of shutdowns, including the distance of animals to the pile and description of specific actions that ensued and resulting behavior of the animal, if any.

ii. 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.

iii. Results of acoustic monitoring, including the information described in the Monitoring Plan.

(b) Reporting injured or dead marine mammals:

i. In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as an injury (Level A harassment), serious injury, or mortality, Navy shall immediately cease the specified activities and report the incident to the Office of Protected Resources (301–427–8425), NMFS, and the West Coast Regional Stranding Coordinator (206–526–6550), NMFS. The report must include the following information:

A. Time and date of the incident;

B. Description of the incident;

C. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);

D. Description of all marine mammal observations in the 24 hours preceding the incident;

E. Species identification or description of the animal(s) involved;

F. Fate of the animal(s); and

G. Photographs or video footage of the animal(s).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with Navy to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Navy may not resume their activities until notified by NMFS.

i. In the event that Navy discovers an injured or dead marine mammal, and the lead observer determines that the

cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate state of decomposition), Navy shall immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS.

The report must include the same information identified in 6(b)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Navy to determine whether additional mitigation measures or modifications to the activities are appropriate.

ii. In the event that Navy discovers an injured or dead marine mammal, and the lead observer determines that the injury or death is not associated with or related to the activities authorized in the IHA (e.g., previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), Navy shall report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Navy shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

7. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.

Request for Public Comments

We request comment on our analysis, the draft authorization, and any other aspect of this Notice of Proposed IHA for Navy's pier replacement activities. Please include with your comments any supporting data or literature citations to help inform our final decision on Navy's request for an MMPA authorization.

Dated: August 29, 2014.

Donna S. Wieting,

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

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BUREAU OF CONSUMER FINANCIAL PROTECTION

Consumer Advisory Board Meeting

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Notice of public meeting.

SUMMARY: This notice sets forth the announcement of a public meeting of the Consumer Advisory Board (CAB or Board) of the Consumer Financial Protection Bureau (Bureau). The notice also describes the functions of the Board. Notice of the meeting is permitted by section 6 of the CAB Charter and is intended to notify the public of this meeting. Specifically, Section X of the CAB Charter states:

(1) Each meeting of the Board shall be open to public observation, to the extent that a facility is available to accommodate the public, unless the Bureau, in accordance with paragraph (4) of this section, determines that the meeting shall be closed. The Bureau also will make reasonable efforts to make the meetings available to the public through live Web streaming. (2) Notice of the time, place and purpose of each meeting, as well as a summary of the proposed agenda, shall be published in the **Federal Register** not more than 45 or less than 15 days prior to the scheduled meeting date. Shorter notice may be given when the Bureau determines that the Board's business so requires; in such event, the public will be given notice at the earliest practicable time. (3) Minutes of meetings, records, reports, studies, and agenda of the Board shall be posted on the Bureau's Web site (*www.consumerfinance.gov*). (4) The Bureau may close to the public a portion of any meeting, for confidential discussion. If the Bureau closes a meeting or any portion of a meeting, the Bureau will issue, at least annually, a summary of the Board's activities during such closed meetings or portions of meetings.

DATES: The meeting date is Thursday, September 11, 2014, 10:30 a.m. to 3:45 p.m. Eastern Standard Time.

ADDRESSES: The meeting location is Gallaudet University, Elstad Auditorium, 800 Florida Avenue, Washington, DC 20002.

FOR FURTHER INFORMATION CONTACT: Tracey Wilkerson, Consumer Advisory Board & Councils, External Affairs, 1700 G Street NW., Washington, DC 20552; telephone: 202–435–7216; *CAB@CFPB.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

Section 1014(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (*http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf*) (Dodd-Frank Act) provides: ''The Director shall establish a Consumer Advisory Board to advise and consult with the Bureau in the exercise of its functions under the Federal consumer financial laws, and to provide information on emerging practices in the consumer financial products or services industry, including regional trends, concerns, and other relevant information.'' 12 U.S.C. 5494.

(a) The purpose of the Board is outlined in Section 1014(a) of the Dodd-Frank Act (*http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf*), which states that the Board shall ''advise and consult with the Bureau in the exercise of its functions under the Federal consumer financial laws'' and ''provide information on emerging practices in the consumer financial products or services industry, including regional trends, concerns, and other relevant information.'' (b) To carry out the Board's purpose, the scope of its activities shall include providing information, analysis, and recommendations to the Bureau. The Board will generally serve as a vehicle for market intelligence and expertise for the Bureau. Its objectives will include identifying and assessing the impact on consumers and other market participants of new, emerging, and changing products, practices, or services. (c) The Board will also be available to advise and consult with the Director and the Bureau on other matters related to the Bureau's functions under the Dodd-Frank Act.

II. Agenda

The Consumer Advisory Board will discuss trends and themes related to technology and access to financial services.

Persons who need a reasonable accommodation to participate should contact *CFPB_504Request@cfpb.gov,* 202–435–9EEO, 1–855–233–0362, or 202–435–9742 (TTY) at least ten business days prior to the meeting or event to request assistance. The request must identify the date, time, location, and title of the meeting or event, the nature of the assistance requested, and contact information for the requester. CFPB will strive to provide, but cannot guarantee that accommodation will be provided for late requests.

Individuals who wish to attend the Consumer Advisory Board meeting must RSVP to *cfpb_cabandcouncilsevents@cfpb.gov* by noon, Tuesday, September 9, 2014. Members of the public must RSVP by the due date and must include ''CAB'' in the subject line of the RSVP.

III. Availability

The Board's agenda will be made available to the public on Wednesday, September 3, 2014, via *consumerfinance.gov.* Individuals should express in their RSVP if they require a paper copy of the agenda.