Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: August 28, 2015.

**Glenna Mickelson,**

*Management Analyst, Office of the Chief Information Officer.*

[FR Doc. 2015–21735 Filed 9–1–15; 8:45 am]

**BILLING CODE 3510–13–P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

**RIN 0648–XE118**

### Determination of Overfishing or an Overfished Condition

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

**ACTION:** Notice.

**SUMMARY:** This action serves as a notice that NMFS, on behalf of the Secretary of Commerce (Secretary), has found that the following four stocks of Pacific salmon are subject to overfishing: Chinook salmon—Columbia River Basin: Upper River Summer; Chinook salmon—Washington Coast: Willapa Bay Fall Natural; Chinook salmon—Washington Coast: Grays Harbor Fall; and Coho salmon—Washington Coast: Hoh. In addition, NMFS has found that the North Pacific swordfish stock in the Eastern Pacific Ocean, which is jointly managed by the Pacific Fishery Management Council and the Western Pacific Fishery Management Council, is subject to overfishing. NMFS, on behalf of the Secretary, notifies the appropriate fishery management council (Council) whenever it determines that overfishing is occurring, a stock is in an overfished condition, a stock is approaching an overfished condition, or when a rebuilding plan has not resulted in adequate progress toward ending overfishing and rebuilding affected fish stocks. None of these stocks is in an overfished condition.

**FOR FURTHER INFORMATION CONTACT:** Regina Spallone, (301) 427–8568.

**SUPPLEMENTARY INFORMATION:** Pursuant to sections 304(e)(2) and (e)(7) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), 16 U.S.C. 1854(e)(2) and (e)(7), and implementing regulations at 50 CFR 600.310(e)(2), NMFS, on behalf of the Secretary, must notify Councils whenever it determines that a stock or stock complex is overfished or approaching an overfished condition; or if an existing rebuilding plan has not ended overfishing or resulted in adequate rebuilding progress. NMFS also notifies Councils when it determines a stock or stock complex is subject to overfishing. Section 304(e)(2) further requires NMFS to publish these notices in the **Federal Register**.

NMFS has determined that four stocks of Pacific salmon are now subject to overfishing:

1. Chinook salmon—Columbia River Basin: Upper River Summer;

2. Chinook salmon—Washington Coast: Willapa Bay Fall Natural;

3. Chinook salmon— Washington Coast: Grays Harbor Fall; and

4. Coho salmon—Washington Coast: Hoh.

The Pacific Fishery Management Council has been informed that they must take action to end overfishing immediately on these stocks.

In addition, NMFS has determined that the North Pacific swordfish stock in the Eastern Pacific Ocean (EPO) is subject to overfishing and is not in an overfished condition. This determination was based on an assessment conducted by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), in conjunction with NOAA scientists. NMFS has confirmed that section 304(i) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) applies because (1) the overfishing condition of swordfish is due largely to excessive international fishing pressure, and (2) there are no management measures (or efficiency measures) to end overfishing under an international agreement to which the U.S. is a party. NMFS has informed the Western Pacific Fishery Management Council and the Pacific Fishery Management Council of their obligations for international and domestic management under Magnuson-Stevens Act sections 304(i) and 304(i)(2) to address international and domestic impacts, respectively. The Councils must develop domestic regulations to address the relative impact of the domestic fishing fleet on the stock, and develop recommendations to the Secretary of State and Congress for international actions to end overfishing on North Pacific swordfish EPO.

Dated: August 27, 2015.

**Emily H. Menashes,**

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

[FR Doc. 2015–21676 Filed 9–1–15; 8:45 am]

**BILLING CODE 3510–22–P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

**RIN 0648–XE057**

### 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 2, 2015.

**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/construction.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/construction.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 this 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 June 12, 2015, 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). The Navy also submitted a separate monitoring plan and draft monitoring report pursuant to requirements of the previous IHA. The Navy submitted revised versions of the request on July 3 and July 26, 2015, a revised version of the monitoring plan on July 21, 2015, and a revised monitoring report on July 29, 2015. These documents were deemed adequate and complete. The pier replacement project is planned to occur over four years; this proposed IHA would cover only the third 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*), northern elephant seal (*Mirounga angustirostris*), gray whale (*Eschrichtius robustus*), bottlenose dolphin (*Tursiops truncatus truncatus*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), Risso's dolphin (*Grampus griseus*), and either short-beaked or long-beaked common dolphins (*Delphinus* spp.). California sea lions are present year-round and are very common in the project area, while bottlenose dolphins and harbor seals are common and likely to be present year-round but with more variable occurrence in San Diego Bay. Gray whales may be observed in San Diego Bay sporadically during migration periods. The remaining species are known to occur in nearshore waters outside San Diego Bay, but are generally only rarely observed near or in the bay. However, recent observations indicate that these species may occur in the project area and therefore could potentially be subject to incidental harassment from the aforementioned activities.

This would be the third such IHA, if issued, following the IHAs issued effective from September 1, 2013, through August 31, 2014 (78 FR 44539) and from October 8, 2014, through October 7, 2015 (79 FR 65378). Monitoring reports are available on the Internet at *www.nmfs.noaa.gov/pr/permits/incidental/construction.htm* and provide 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 third year of construction (the specified activity considered under this proposed IHA), approximately 226 piles would be installed (including six 30-in steel pipe piles, 88 30 x 24-in concrete piles, and 132 16-in concrete-filled fiberglass piles). Demolition of the existing pier would continue concurrently, including the removal of approximately one hundred steel and concrete piles and twenty concrete-filled steel caissons. Removals may occur by multiple means, including vibratory removal, pile cutter, dead pull, and diamond belt saw, as determined to be most effective. Construction work under this proposed IHA is anticipated to require a total of 115 days of in-water work. 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 pile cutter. Vibratory pile removal is not planned but could occur if deemed the most effective technique to remove a given pile; because this technique is not expected to occur we do not consider it separately in this document from vibratory pile driving. 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) may 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 third 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 May 1 through September 15). However, 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 from October through April. In-water pile driving and removal work using pile cutters or vibratory drivers would be limited to 115 days in total under this proposed IHA. Pile driving would occur during normal working hours (approximately 7 a.m. to 6 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 third work window. Please see section 1 of the Navy's application for full detail of construction scheduling for this period. 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 226 steel and concrete piles would be installed. 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 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.

*Methods, Pile Removal*—There are multiple methods for pile removal. Piles were generally removed during the second year construction period by cutting at the mudline, which can be accomplished in various ways. Piles are expected to be removed during this third-year IHA primarily using a pile cutter, which is a bladed hydraulic device that shears the pile off. The preferred method of removing the caisson elements is to cut them at the mudline and then into two sections using a diamond wire cutting saw. 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.

Piles may also be removed by simply dry pulling, or pulling after the pile has been loosened using a vibratory hammer or a pneumatic chipper. Jetting (the application of a focused stream of water under high pressure) may be another option to loosen piles that could not be removed through the previous procedures. Pile removal is not generally expected to require the use of vibratory extraction or pneumatic chipping, and these methods are included here as contingency in the event other methods of extraction are not successful.

TABLE 1—DETAILS OF PILES TO BE INSTALLED

| Purpose | Location | Planned timing | Pile type | Pile number |
|---|---|---|---|---|
| Dolphin batter piles | North mooring | Fall 2015 | 30-in steel pipe | 6 |
| Fender piles | Bayward side of new pier | Fall–Winter 2015 | 24 x 30-in concrete | 88 |
| Fender piles | Bayward side of new pier | Fall–Winter 2015 | 16-in concrete-filled fiberglass | 132 |

*Construction*—Construction work during the proposed third year of activity would include driving of steel pipe piles to complete construction of the northern mooring dolphin and driving of concrete and concrete-filled fiberglass fender piles on the bayward section of the new pier. The concrete piles (primary fender piles) will be installed by first stabbing with the crane, before being jetted to within approximately five feet of design tip elevation, then driven using an impact hammer to tip elevation. The concrete-filled fiberglass piles (secondary and corner fender piles) would be stabbed with the crane before being impact driven. This work is expected to require a total of 61 days.

*Demolition*—Demolition of the north segment of the existing pier will be conducted during construction activity. 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.'' The in-water portion of demolition work planned during the period of this proposed IHA is expected to require 54 days in total. 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-, 16-, and 24-in) | 56 |
| Plastic fender piles (13-in) | 34 |
| Temporary steel piles (30-in) | 12 |
| Concrete-filled steel caissons | 20 |

*Description of Work Accomplished*

During the first in-water work season, two primary activities were conducted: Relocation of the Marine Mammal Program and the Indicator Pile Program (IPP). During the second in-water work season, the IPP was concluded and simultaneous construction of the new pier and demolition of the old pier begun.

The Navy Marine Mammal Program, administered by Space and Naval Warfare Systems Command Systems Center, was moved approximately three kilometers to the Naval Mine and Anti-submarine Warfare Command (see Figures 1–1 and 1–2 of the Navy's Year 1 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 Year 1 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 designed to validate the length of pile required and the method of installation (vibratory and impact) as well as to validate acoustic sound pressure levels of the various sizes and locations (*i.e.,* shallow versus deeper water) of installed piles. 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. 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. One additional 36-in pile was installed in Spring 2015, under the Year 2 IHA, to conclude the IPP.

Production pile driving associated with construction of the new pier was begun in Fall 2014 and continued into Spring 2015. Both vibratory and impact driving was used, as described above, to install 238 steel pipe piles (four 18-in, 31 30-in, and 203 36-in diameter). Hammers used were the same as those described above. Demolition activity was begun in Spring 2015, and included the removal of four caissons, eighteen concrete fender piles, and a portion of concrete decking from the existing fuel pier. In total, this work consisted of one hundred days of activity from October 16, 2014, through April 29, 2015. Of these one hundred days of in-water work, eighteen days involved only impact driving, fifteen days included only vibratory driving, and 65 days where both types of driving occurred. The remaining two days involved only demolition activities. Please see the Year 2 monitoring report for more information. Additional work may be conducted under the existing IHA between September 15 and October 7, 2015, in which case the submitted

monitoring report would be amended as necessary.

**Description of Marine Mammals in the Area of the Specified Activity**

There are four marine mammal species which are either resident or have known seasonal occurrence in the vicinity of San Diego Bay, including the California sea lion, harbor seal, bottlenose dolphin, and gray whale (see Figures 3–1 through 3–4 and 4–1 in the Navy's application). In addition, common dolphins (see Figure 3–4 in the Navy's application), the Pacific white-sided dolphin, Risso's dolphin, and northern elephant seals are known to occur in deeper waters in the vicinity of San Diego Bay and/or have been recently observed within the bay. Although the latter three species of cetacean would not generally be expected to occur within the project area, the potential for changes in occurrence patterns due to developing El Niño conditions in conjunction with recent observations leads us to believe that authorization of incidental take is warranted. Common dolphins have been documented regularly at the Navy's nearby Silver Strand Training Complex, and were observed in the project area during both previous years of project activity. The Pacific white-sided dolphin has been sighted along a previously used transect on the opposite side of the Point Loma peninsula (Merkel and Associates, 2008) and there were several observations of Pacific white-sided dolphins during Year 2 monitoring. Risso's dolphin is fairly common in southern California coastal waters (*e.g.,* Campbell *et al.,* 2010), and could occur in the bay. Northern elephant seals are included based on their continuing increase in numbers along the Pacific coast (Carretta *et al.,* 2015) and the likelihood that animals that reproduce on the islands offshore of Baja California and mainland Mexico—where the population is also increasing—could move through the project area during migration, as well as the observation of a juvenile seal near the Fuel Pier in April 2015.

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.

In addition, other species that occur in the Southern California Bight may have the potential for isolated occurrence within San Diego Bay or just offshore. In particular, a short-finned pilot whale (*Globicephala macrorhynchus*) was observed off Ballast Point, and a Steller sea lion (*Eumetopias jubatus monteriensis*) was seen in the project area during Year 2. These species are not typically observed near the project area and, unlike the previously mentioned species, we do not believe it likely that they will occur in the future. Given the unlikelihood of their exposure to sound generated from the project, these species 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 21, 2015). In addition, we provided information for the potentially affected stocks, including details of stock-wide status, trends, and threats, in our **Federal Register** notices of proposed authorization associated with the first- and second-year IHAs (78 FR 30873; May 23, 2013 and 79 FR 53026; September 5, 2014) and refer the reader to those documents 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 Figures 3–1 through 3–5 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.,* 2015).

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 | 20,990 (0.05; 20,125; 2011). | 624 | [6] 132 | Occasional migratory visitor; 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 | Common; year-round. |
| Short-beaked common dolphin. | California/Oregon/Washington. | -; N | 411,211 (0.21; 343,990; 2008). | 3,440 | 64 | Occasional; year-round (but more common in warm season). |
| Long-beaked common dolphin. | California ..... | -; N | 107,016 (0.42; 76,224; 2009). | 610 | 13.8 | Occasional; year-round (but more common in warm season). |

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

| 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 |
|---|---|---|---|---|---|---|
| Pacific white-sided dolphin. | California/Oregon/ Washington. | -; N | 26,930 (0.28; 21,406; 2008). | 171 | 17.8 | Uncommon; year-round. |
| Risso's dolphin .... | California/Oregon/ Washington. | -; N | 6,272 (0.3; 4,913; 2008). | 39 | 1.6 | Rare; year-round (but more common in cool season). |
| **Order Carnivora—Superfamily Pinnipedia** | | | | | | |
| **Family Otariidae (eared seals and sea lions)** | | | | | | |
| California sea lion | U.S. ..... | -; N | 296,750 (n/a; 153,337; 2011). | 9,200 | 389 | Abundant; year-round. |
| **Family Phocidae (earless seals)** | | | | | | |
| Harbor seal ..... | California ..... | -; N | 30,968 (n/a; 27,348; 2012). | 1,641 | 43 | Common; year-round. |
| Northern elephant seal. | California breeding. | -; N | 179,000 (n/a; 81,368; 2010). | 4,882 | 8.8 | Rare; 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 species (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.,* 2015).

[6] Includes annual Russian harvest of 127 whales.

*Gray Whale*

Two populations of gray whales are recognized, Eastern and Western North Pacific (ENP and WNP). 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.

## Potential Effects of the Specified Activity on Marine Mammals and Their Habitat

We provided discussion of the potential effects of the specified activity on marine mammals and their habitat in our **Federal Register** notices of proposed authorization associated with the first- and second-year IHAs (78 FR 30873; May 23, 2013 and 79 FR 53026; September 5, 2014). The specified activity associated with this proposed IHA is substantially similar to those considered for the first- and second-year IHAs and the potential effects of the specified activity are the same as those identified in those documents. Therefore, we do not reprint the information here but refer the reader to those documents.

In the aforementioned **Federal Register** notices, we also provided general background information on sound and marine mammal hearing and a description of sound sources and ambient sound and refer the reader to

those documents. However, because certain 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 (rms) 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 an 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.

**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- and second-year IHAs. For this proposed IHA, data from acoustic monitoring conducted during the first two years 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, the Navy has defined buffers to the estimated Level A harassment zones to further reduce the potential for Level A harassment. In addition to the measures described later in this section, the Navy would 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.

*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 dB 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). Estimated radial distances to the relevant thresholds 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 20 m will be established during all pile driving and removal activities, regardless of the estimated zone. This represents a buffer of 10 m added to the previously implemented 10 m minimum shutdown zone. In addition the Navy proposes to effect a buffered shutdown zone that is intended to significantly reduce the potential for Level A harassment given that, in particular, California sea lions are quite abundant in the project area and bottlenose dolphins may surface unpredictably and move erratically in an area with a large amount of construction equipment. The Navy considered typical swim speeds (Godfrey, 1985; Lockyer and Morris, 1987; Fish, 1997; Fish *et al.,* 2003; Rohr *et al.,* 2002; Noren *et al.,* 2006) and past field experience (*e.g.,* typical elapsed time from observation of an animal to shutdown of equipment) in initially defining these buffered zones, and then evaluated the practicality and effectiveness of the zones during the Year 2 construction period. The Navy will add a buffer of 75 m to the 190 dB zone for impact driving of steel piles (doubling the effective zone to 150 m radius) and will add a buffer of 100 m to the 180 dB zone for impact driving of steel piles (increasing the effective zone to 450 m). These zones are also shown in Table 7. 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.

Acoustic measurements will continue during the third year of project activity and zones would be adjusted as indicated by empirical data. Please see the Navy's Acoustic and Marine Species Monitoring Plan (Monitoring Plan; available at *www.nmfs.noaa.gov/pr/permits/incidental/construction.htm*) for full details.

*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 Monitoring Plan 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 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 and for thirty minutes following the conclusion of pile driving.

*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–April 1 or, depending on circumstances, to April 30. 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 of steel piles. 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; these requirements are specific to both vibratory and impact driving and the requirement. For example, the requirement to implement soft start for impact driving is independent of whether vibratory driving has occurred within the past thirty minutes.

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 Monitoring Plan (available at *www.nmfs.noaa.gov/pr/permits/incidental/construction.htm*) for full details of the requirements for monitoring and reporting. Notional monitoring locations (for biological and acoustic monitoring) are shown in Figures 3–1 and 3–2 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. We have preliminarily determined this monitoring plan, which is summarized here and which largely follows the monitoring strategies required and successfully implemented under the previous IHAs, 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, including the implementation of in-situ acoustic monitoring efforts to continue to measure SPLs from in-water construction and demolition activities not previously monitored or validated during the previous IHAs. At minimum,

acoustic sound levels would be collected and evaluated acoustic for five piles of each type of fender pile to be installed.

- 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 continue to be evaluated 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 to 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 Monitoring Plan. Please see Table 2–2 of the Plan for a list of equipment to be used during acoustic monitoring. Monitoring locations will be determined based on results of previous acoustic monitoring effort and the best professional judgment of acoustic technicians.

Some details of the methodology include:

- No acoustic data to be collected for 30-in steel piles as sufficient data has been collected for 36-in steel piles during previous two years. One airborne sound monitoring station will be maintained.
- Hydroacoustic monitoring to be conducted at source for impact driving of a minimum of five of each type of fender pile in order to document SPLs.
- Sound level meters to be deployed to continue validation of source SPLs and 160/120 dB ZOIs as documented from previous acoustic monitoring efforts.
- Source SPLs for all construction or demolition activities will be measured for the first five events of each size or type of pile or activity if not sufficiently measured and/or validated previously; Navy would conduct additional monitoring if source unexpectedly exceeds any assumed values.
- 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).
- Ambient conditions 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 a.m. to 6 p.m., Monday through Saturday) 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).
- 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).
- From all the strikes associated with each pile occurring during the Level 4 (highest energy) phase these 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 SEL in dB re $\mu Pa^2$ sec
  - Cumulative SEL as defined by the mean single strike SEL + 10*log (# hammer strikes) in dB re $\mu Pa^2$ sec
  - A frequency spectrum (pressure spectral density) in [dB re $\mu Pa^2$ 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.

Full details of acoustic monitoring requirements may be found in section 3.2 of the Navy's approved Monitoring Plan and in section 13 of the Navy's application.

*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 Monitoring Plan, with observers located at the best practicable vantage points. Notional monitoring locations are shown in Figures 3–1 and 3–2 of the Navy's Plan. Please see that plan, available at *www.nmfs.noaa.gov/pr/permits/incidental/construction.htm,* for full details of the required marine mammal monitoring. Section 4.2 of the Plan and section 13 of the Navy's application offer more detail regarding monitoring protocols. 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 construction/demolition platform in order to observe the respective shutdown zones for vibratory and impact pile driving or for applicable demolition activities. 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. Additional land, pier, or vessel-based MMOs will be positioned to monitor the shutdown zones and the buffer zones, as notionally indicated in Figures 3–1 and 3–2 of the Navy's application. Up to five additional MMOs will be deployed during driving of steel piles, and at least one additional MMOs will be deployed during driving of fender piles and during applicable demolition activities.

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 (for steel piles) 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.

If any species for which take is not authorized is observed by a MMO during applicable construction or demolition activities, all construction will be stopped immediately. If a boat is available, MMOs will follow the animal(s) at a minimum distance of 100 m until the animal has left the Level B ZOI. Pile driving will commence if the animal has not been seen inside the Level B ZOI for at least one hour of observation. If the animal is resighted again, pile driving will be stopped and a boat-based MMO (if available) will follow the animal until it has left the Level B ZOI.

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 authorizations 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 Year 2 activities, the Navy did not exceed the take levels authorized under the IHA. However, the Navy did record four observations of California sea lions within the defined 190-dB shutdown zone (please see Appendix H of the Navy's monitoring report for more details and below for further discussion).

The general objectives of the monitoring plan were similar to those described above for the year three monitoring plan. For acoustic monitoring, the primary goal was to continue validation of the acoustic ZOI contours utilizing hydroacoustic measurements collected during the IPP and production pile driving 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. The Navy previously conducted acoustic monitoring for pile driving of steel pile associated with the IPP and production driving and for concrete piles associated with the temporary relocation of the Navy's Marine Mammal Program.

*Acoustic Monitoring Results*—For a full description of acoustic monitoring methodology, please see section 2.3 of the Navy's monitoring report, including Figure 2–1 for representative monitoring locations. Results from Years 1 and 2 are displayed in Table 4. Please see our notice of proposed IHA for the Year 2 IHA (79 FR 53026; September 5, 2014) or the Navy's Year 1 monitoring report for more detailed description of monitoring accomplished during Year 1.

For acoustic monitoring associated with production pile driving, a continuous hydroacoustic monitoring systems were positioned at source (10 m from the pile), in the vicinity of the predicted 180-dB behavioral ZOI for impact driving (225–400 m), and opportunistically at far-field Level B ZOIs predicted on the basis of past monitoring and measurements of

ambient noise in the bay (see Figure 2–1 in the Navy's monitoring report). Hydrophones were deployed from the dock, barge, or moored vessel at half the water depth. Pile locations and corresponding SPL measurements of pile driving activities were partitioned into shallow water and deep water; SPLs for shallow pile driving activities were only measured intermittently because associated SPLs were previously validated. Airborne sound measurements were also collected intermittently, but in sufficient amounts to continue validation of airborne ZOIs for pinniped species. SPLs were recorded and analyzed for greater than ten percent of all pile driving of 30- 36-in steel pipe piles driven in deep water. Additionally, pile driving of temporary 18-in steel pipe piles, 36-in abutment steel pipe piles, and demolition of existing pier structural members (caissons and fender piles) were measured to document SPLs associated with each construction activity.

SPLs of pile driving and demolition activities conducted during Year 2 fell within expected levels but varied spatially relative to the existing fuel pier structure and maximum source levels for individual piles (Table 4). For both vibratory and impact pile driving methods, results from the IPP (Year 1) and 2014/2015 production pile driving (Year 2) showed that transmission loss for piles driven in shallow water inside of the existing fuel pier was greater than piles driven in deep water outside of the existing pier. Differences in depth, sediment type, and existing in-water pier/wharf structures likely accounted for variations in transmission loss and measured differences in SPLs recorded at the shutdown and far-field locations for shallow versus deep piles of the same type and size. SPLs documented during vibratory and impact pile driving of shallow and deep steel pipe piles of the same size displayed notable differences in SPLs at shutdown range and to a lesser extent at source.

Vibratory SPLs were generally as expected. Results calculated for sound source levels of two 30-in steel pipe piles and nineteen 36-in steel pipe piles showed SPLs ranging from 160–178 dB rms. Average maximum SPLs varied approximately 13 dB rms with nominal differences between pile sizes. Evaluation of transmission loss displayed similar results to previously modeled outcomes, with the distance at which vibratory sound sources levels were indistinguishable from ambient SPLs approximately 2,500–3,000 m from the source.

For impact driving, measurements during production pile driving showed maximum SPL values at source ranging from 192–204 dB rms, with the highest values being for 36-in piles driven in deeper water. Four temporary 18-in steel pipe piles were impact driven to support the existing pier structure, with reported results of 184 dB rms at 10 m. Validated SPLs of impact and vibratory pile driving of deep 36-in steel pipe piles were less than, but in relative agreement, with those estimated from the transmission loss model used to establish ZOIs for Year 2. Differences in measured ZOIs from transmission loss model results were expected given the inherent variation in pile source strength and propagation conditions, and are not considered significant.

Measurements were made during both soft start and normal driving for both vibratory and impact driving. A gradual building of SPLs during startup of vibratory pile driving can be observed (see Figure 3–2 of the Navy's monitoring report) but soft start SPLs were not notably different from full production driving and varied considerably between piles and locations based on the depth of the pile and underlying substrate. The vibratory soft start process was evaluated for five of the nineteen measured piles at both source and shutdown with corresponding soft start SPLs averaged across all three pulses of the soft start procedure and compared to full production vibratory pile driving SPLs. The resulting soft start SPLs averaged 1.8 dB rms less than full production vibratory pile driving at source; however, of the five measured events, only two showed an increased SPL during full power driving and SPLs were actually higher during soft start for one event. Soft start vibratory SPLs where mostly much lower during the initial pulse but on average where not significantly different than SPLs recorded at source or at shutdown during full production vibratory driving (see Table 3–3 of the Navy's monitoring report). Soft start SPL values for impact driving ranged between 10 and 15 dB rms lower than full energy production impact pile driving SPLs, depending on the individual pile sizes and locations (see Figure 3–8 of 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 [4] | 100 [4] |
| NMAWC | Impact | 12- and 16-in concrete | 58 | 182 | 108 | n/a | 126 | 13 | <10 | 728 | 105 |
| Fuel Pier (Year 1) | Vibratory | 30- and 36-in steel pipe | 9 | 167 | 113 | [2] 3,000 | n/a | <10 | <10 | 233 | 71 |
| | Impact | 36-in steel pipe | 7 | 200 | | n/a | [3] 2,500 | [3] 450 | [3] 75 | | |
| Fuel Pier (Year 2) [7] | Vibratory | 30-in steel pipe | 2 | 165 | 107 | | | | | | |
| | Impact | 30-in steel pipe | 2 | 196 | | | | | | | |
| | Vibratory | 36-in steel pipe | 31 | 178 | | 2,500 | n/a | <10 | <10 | 182 | 78 |
| | Impact | 36-in steel pipe | 31 | 204 | | n/a | 2,000 | 350 | 75 | | |
| | Hydraulic cutting | 24-in concrete pile | 4 | [5] 154 | | | | | | | |
| | Diamond saw cutting | 72-in caisson | 4 | [6] 155 | | | | | | | |

[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.

[4] Distances based on impact driving.

[5] This activity was measured as an impulsive sound, as the sound production was intermittent as the hydraulic compression of the cutter broke through different layers. This sound source is considerd to be continuous for purposes of exposure estimation and mitigation.

[6] Value measured at 15 m from source.

[7] Year 2 values are maximum values rather than average. We use these in defining conservative ZOIs.

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 in December 2014, and March, April, and May 2015. Ambient sound level recordings were collected in the absence of construction activities, and during typical construction time periods (7 a.m. to 6 p.m.), at locations that were between 400 and 700 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 project site documented per-deployment ninetieth percentile averages from 122–131 dB rms, with an overall mean of approximately 130 dB. Removal of outlying values produced a an overall fiftieth percentile value of approximately 128 dB rms, consistent with previous measured values and within expected ranges.

*Marine Mammal Monitoring Results*—Marine mammal monitoring was conducted as required under the IHA and as described in the Year 2 monitoring plan and in our **Federal Register** notice of proposed authorization associated with the Year 2 IHA (79 FR 53026; September 5, 2014). For a full description of monitoring methodology, please see section 2.4 of the Navy's monitoring report, including Figure 2–1 for representative monitoring locations and Figure 2–2 for monitoring zones. Monitoring protocols were managed adaptively during the course of the second-year IHA. For example, evaluated the use of the shutdown zone buffers described under ''Proposed Mitigation''.

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 3–22, 3–27, 3–31, 3–35, 3–38, and 3–39 for locations of observations and incidents of take relative to the project sites. Take authorization for the second-year authorization was informed by an assumption that 135 days of in-water construction would occur, whereas only 100 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 135 days had been reached. In addition to the results shown in Table 5, the Navy observed a mixed group of one bottlenose dolphin and two common dolphins, unidentified delphinids (ten sightings of 227 individuals), unidentified large whales (four sightings of nine individuals), and unidentified pinnipeds (35 sightings of 35 individuals). None of these were within an active Level B harassment zone.

As noted above, four individual California sea lions were 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 animals to the piles ranged from 20–60 m. Pile driving activity was immediately halted upon observation of the animals within the shutdown zones. In all cases, the animals were observed following the shutdown and no unusual behaviors or indicators of distress were noted. Event-specific reports are available in Appendix H of the Navy's monitoring report.

There were a total of thirty sightings of dead California sea lions in the water and additional reports of emaciated individuals in the water, or on docks, piers, and barges in the vicinity of the project. All dead animals were evaluated and deemed as having died as a result of factors unrelated to the project, likely due to the unusual mortality event currently ongoing in southern California waters. All such observations were appropriately reported in accordance with the IHA and per protocols agreed-upon with NMFS' regional stranding coordinator.

TABLE 5—MARINE MAMMAL MONITORING RESULTS

| Species | Total sightings | Total individuals | Total incidents of Level B take |
|---|---|---|---|
| California sea lion | 5,397 | 7,507 | [2] [3] 2,509 |
| Harbor seal | 241 | 248 | [3] 70 |
| Bottlenose dolphin | 247 | 695 | [3] 250 |
| Gray whale | 3 | 5 | 0 |
| Common dolphin | 20 | 850 | 38 |
| Pacific white-sided dolphin [1] | 7 | 27 | 0 |
| Northern elephant seal [1] | 2 | 1 | 0 |
| Steller sea lion [1] | 1 | 1 | 0 |
| Short-finned pilot whale [1] | 1 | 1 | 0 |

[1] No take was authorized for these species. A single juvenile elephant seal was observed hauled out on shore on two occasions.

[2] Twelve individuals were considered taken by Level B harassment due to exposure to airborne noise. These individuals were observed within the airborne ZOI and did not enter the water during the course of pile driving activity.

[3] Take numbers include thirteen unidentified pinnipeds and one unidentified dolphin, assumed on the basis of MMO observation notes to be eleven California sea lions, two harbor seals, and a bottlenose dolphin.

**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 demolition and involving temporary changes in behavior. The proposed mitigation and monitoring measures (*i.e.,* buffered shutdown zones) are expected to minimize the possibility of Level A harassment such that we believe it is unlikely. We do not expect 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. In practice, depending on the amount of information available to characterize daily and seasonal movement and distribution of affected marine mammals, it can be difficult to distinguish between the number of individuals harassed and the instances of harassment and, when duration of the activity is considered, it can result in a take estimate that overestimates the number of individuals harassed. 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, Pacific white-sided dolphins, Risso's dolphins, northern elephant seals, 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- and second-year IHAs (see Figure 6–1 of the Navy's application).

Impact and vibratory driving of steel pipe piles, impact driving of concrete and concrete-filled fiberglass piles, and demolition via pile cutting (and potentially vibratory removal) is planned for the next phase of work. 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 196 dB rms and 165 dB rms for impact and vibratory driving, respectively. We conservatively use the vibratory pile installation value as proxy for vibratory pile removal, if it occurs. 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. Although Year 2 measurements indicate that such attenuation may occur closer to 2,500 m, we conservatively retain the larger distance for estimating exposures.

Because we have no new measurements for the two types of fender piles, we use the same proxy source values as were originally presented in the Navy's EA and first-year IHA application. There are no available values for 24 × 30-in square concrete piles, but there are measurements available for 24-in octagonal concrete piles (see Table 6–4 of the Navy's application). We use the largest such value (176 dB rms; Caltrans, 2012). There are also no available measurements for concrete-filled fiberglass piles, so we use a proxy value from driving of 16-in solid concrete piles (173 dB rms; Caltrans, 2012). The ZOI ranges for these piles are as presented in the original documents, and are therefore conservative in comparison with the revised TL curve shown in Figure 6–1 of the Navy's application.

The Navy measured several demolition activities during the Year 2 IHA (hydraulic pile cutting, diamond saw cutting) with results ranging from approximately 152–155 dB rms. Using these and the TL curve, the Navy estimates a ZOI range of approximately 1,500 m. However, based on empirical evidence from the prior two years of monitoring effort, the Navy states that attenuation to background levels for these activities may be closer to 1,000 m, making the assumed ZOI very conservative. Continued acoustic monitoring efforts should provide further data relating to these activities. For airborne sound, we assume a single, precautionary zone here that is based on measured values for impact driving of steel piles (approximately 107 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] | [2] 75 | [2] 350 | 2,000 | n/a | 78 | 182 |
| Vibratory driving, steel piles (predicted) | <10 | 14 | n/a | 6,470 | 9 | 28 |
| Vibratory driving, steel piles (measured) | <10 | <10 | n/a | 3,000 | | |
| Impact driving, 24x30 concrete piles | <10 | <10 | 505 | n/a | | |
| Impact driving, 16-in concrete-filled fiberglass piles | <10 | <10 | 259 | n/a | | |
| Pile cutting (demolition) | <10 | <10 | n/a | 1,500 | | |

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

[2] The buffered zones for use in mitigation will be 150 m and 450 m, respectively. The minimum zone for other activities listed here will be 20 m.

*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), the majority of such fixed areas are not within the ZOIs for airborne sound. The zones for sea lions are within the minimum shutdown zone defined for underwater sound. Accordingly, we previously stated that incidents of incidental take resulting solely from airborne sound are unlikely. However, due to the additional surfaces available for California sea lions to haul out on during construction activity, twelve individuals were unexpectedly observed during Year 2 monitoring as hauled out within the airborne ZOI and did not subsequently enter the water during pile driving. Therefore, these animals were considered taken by airborne noise and we consider that this could occur again during Year 3 construction activity. There is a 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.

*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). 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. Whereas analyses for the first-year IHA relied on surveys conducted from 2007–12, continuing surveys by the Navy have generally indicated increasing abundance of all species and the second-year IHA relied on 2012–14 survey data. Year 2 project monitoring showed even greater abundance of certain species, and we consider all of these data 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, required project marine mammal monitoring, or from opportunistic observations for more rarely observed species (see Figures 3–1 through 3–5 of the Navy's application).

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.,* 2015) 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 9; the document is publicly available on the Internet at: *nwtteis.com/DocumentsandReferences/NWTTDocuments/SupportingTechnicalDocuments.aspx* (accessed August 24, 2015).

*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;
- The assumed ZOIs and days of activity are as shown in Table 8; 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.

| Activity | Number of days | ZOI ($km^2$) |
|---|---|---|
| Impact and vibratory driving, 30-in steel piles [1] | 6 | 5.6572 |
| Vibratory removal | 6 | 5.6572 |
| Impact driving, 24x32-in concrete piles | 22 | 0.1914 |
| Impact driving, 16-in concrete-filled fiberglass piles | 33 | 0.0834 |
| Hydraulic pile cutting/diamond saw cutting | 48 | 3.0786 |

[1] We assume that impact driving of 30-in steel piles would always occur on the same day as vibratory driving of the same piles. Therefore, the impact driving ZOI (3.8894 $km^2$) would always be subsumed by the vibratory driving ZOI.

Where appropriate, we use average daily number of individuals observed within the project area during Navy marine mammal surveys converted to a density value by using the largest ZOI as the effective observation area. 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.

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 9 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; note that the NMSDD does not present density estimates specific to San Diego Bay for other species). 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, Year 2 project monitoring showed an average of 90.35 individuals per day occurring within the project area (*i.e.,* 5.6752 $km^2$). 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 the most recent monitoring effort—would be appropriate for use in estimating potential incidents of take. As noted previously, we also account separately for the potential that California sea lions may experience Level B harassment solely as a result of airborne noise. There is no firm quantitative basis on which to base an estimate of potential occurrences of harassment by airborne noise, as use of the aforementioned density estimate would not be appropriate, California sea lion use of opportunistic haul-outs within the airborne ZOI is not predictable, and the potential reaction of hauled animals to airborne noise (*i.e.,* whether hauled sea lions enter the water during construction activity and are subsequently exposed to underwater noise or remain hauled for the duration) is also not predictable. Therefore, we assume and propose to authorize the take of ten individual California sea lions solely by airborne noise.

*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, Year 2 project monitoring indicates an average abundance of 2.83 individuals per day in the project area. 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/km² for southern California, but 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 0.115 animals/km² 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 is applicable, 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. 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/km² within 1 km of the coast from Baja to San Francisco in all four seasons. However, given the high variability observed in terms of numbers and locations of bottlenose dolphin sightings, we believe it appropriate to take a precautionary approach to take estimation use Year 2 sightings (7.09 individuals per day) as the basis for a density value.

*Common Dolphin*

Common dolphins are present in the coastal waters outside of San Diego Bay, but have typically 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 in 2014 prompted their inclusion in the second IHA, a decision supported by increased observations of common dolphins during Year 2. 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/km² for the long-beaked common dolphin within southern California waters (derived from Ferguson and Barlow [2003] and Barlow and Forney [2007]). However, given the large numbers of dolphins and increasing observations during 2014–15, we use the sighting rate of 8.67 dolphins per day as the basis for a density value. Although 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 a single value to all common dolphins that may occur in the project area. Any incidents of take could be of either long-beaked or short-beaked common dolphins.

*Pacific White-sided Dolphin*

Pacific white-sided dolphins are not known from the project area, but were observed in the bay on several occasions during Year 2 monitoring (0.28 individuals per day). This information produces a density estimate slightly lower than that found in Hanser *et al.* (2015), and is the only information available for use in estimating potential exposures. However, this density value produces a zero estimate for all scenarios. Based on 2014–15 observations in the project area, this likely underrepresents the potential occurrence of Pacific white-sided dolphins. Therefore, we assume that one group of dolphins may occur in the relevant ZOI for each activity with a large Level B ZOI (*i.e.,* vibratory pile driving, vibratory pile removal, and hydraulic pile cutting/diamond saw cutting). For each of these presumed occurrences, we assume that it could be of the largest group size observed by the Navy during 2014–15 project monitoring (*i.e.,* seven).

*Risso's Dolphin*

Although no Risso's dolphins have not been observed in the project area, they are one of the more common species known from deeper waters nearby. Therefore, we use the regional density estimate from Hanser *et al.* (2015) in estimating potential exposures.

*Northern Elephant Seal*

Only one elephant seal has been observed in the project area, but given the increasing regional abundances for this species, we believe it reasonable to propose take authorization, and the regional density estimate found in Hanser *et al.* (2015) is used here. However, as for Pacific white-sided dolphins, use of this density would produce a zero exposure estimate for all scenarios, which likely underestimates potential occurrence of this specie sin the project area. Therefore, we assume that one elephant seal may occur in the relevant ZOI for each of the three activity scenarios described above for Pacific white-sided dolphin. It is unlikely that elephant seals would haul out on any structures within the airborne ZOIs, and we do not consider harassment via airborne noise as a possibility for this species.

TABLE 9—CALCULATIONS FOR INCIDENTAL TAKE ESTIMATION

| Species | Density | Impact driving, steel [1] | Vibratory driving, steel | Impact driving, concrete | Impact driving, concrete/ fiberglass | Vibratory removal | Pile cutting | Airborne | Total proposed authorized takes (% of total stock) |
|---|---|---|---|---|---|---|---|---|---|
| California sea lion | 15.9201 | 372 | 540 | 22 | 33 | 540 | 2,352 | 10 | 3,497 (1.2) |
| Harbor seal | 0.4987 | 12 | 18 | 0 | 0 | 18 | 96 | 0 | 132 (0.4) |
| Bottlenose dolphin | 1.2493 | 30 | 42 | 0 | 0 | 42 | 192 | n/a | 276 (55.2) [2] |
| Common dolphin | 1.5277 | 36 | 54 | 0 | 0 | 54 | 240 | n/a | 348 (0.3 [LB]/0.1 [SB]) [3] |
| Gray whale | 0.115 | 0 | 6 | 0 | 0 | 6 | 0 | n/a | 12 (0.1) |
| Northern elephant seal [4] | 0.0508 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 3 (0.002) |
| Pacific white-sided dolphin [5] | 0.0493 | 1 | 1 | 0 | 0 | 1 | 1 | n/a | 21 (0.04) |
| Risso's dolphin | 0.2029 | 6 | 6 | 0 | 0 | 6 | 48 | n/a | 60 (1.0) |

[1] We assume that impact driving of steel piles would occur on the same day as vibratory driving of the same piles. Therefore, these estimates are provided for reference only and are not included in the proposed total take authorization.
[2] Total stock assumed to be 500 for purposes of calculation. See Table 3.
[3] LB = long-beaked; SB = short-beaked.
[4] Although the density calculation gives a result of zero for all scenarios, we assume one occurrence of one northern elephant seal will occur in the relevant ZOI for each indicated activity.
[5] Although the density calculation gives a result of zero for all scenarios, we assume one occurrence of a group of Pacific white-sided dolphins will occur in the relevant ZOI for each indicated activity, with a group size of seven.

## 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. For example, use of vibratory hammers 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 buffered 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 past years of this project and 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 9) 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 2015–16 and the 2014–15 monitoring report. Based on that review, we have determined that the proposed action is very similar to that considered in the previous IHAs. 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/construction.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.*), northern elephant seal (*Mirounga angustirostris*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), Risso's dolphin (*Grampus griseus*), 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 for numbers of take authorized.

TABLE 1—AUTHORIZED TAKE NUMBERS, BY SPECIES

| Species | Authorized take |
|---|---|
| Harbor seal | 137 |
| California sea lion | 3,519 |
| Northern elephant seal | 3 |
| California coastal bottlenose dolphin | 276 |
| Pacific white-sided dolphin | 12 |
| Risso's dolphin | 60 |
| Common dolphin | 348 |
| Gray whale | 12 |

(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.

(f) The Navy may conduct a maximum of 115 days of in-water impact and vibratory pile driving and demolition (to include vibratory pile removal, hydraulic pile cutting, and/or diamond saw cutting).

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 20 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease. See Table 2 for minimum radial distances required for shutdown zones.

TABLE 2—MINIMUM RADIAL DISTANCE TO SHUTDOWN AND DISTURBANCE ZONES

| Activity | Distance to threshold in meters | | | |
|---|---|---|---|---|
| | 190 dB | 180 dB | 160 dB | 120 dB |
| Impact driving, steel piles | 150 | 450 | 2,000 | n/a |
| Vibratory driving/removal, steel piles | 20 | 20 | n/a | 3,000 |
| Impact driving, concrete piles | 20 | 20 | 505 | n/a |
| Impact driving, concrete/fiberglass piles | 20 | 20 | 259 | n/a |
| Hydraulic cutting/diamond saw cutting | 20 | 20 | n/a | 1,500 |

(b) The Navy shall shutdown activity as appropriate upon observation of any species for which take is not authorized. Activity shall not be resumed until those species have been observed to leave the relevant zone or until one hour has elapsed.

(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 and applicable demolition activities, a minimum of one observer shall be stationed at the active pile driving rig in order to monitor the shutdown zones.

ii. For pile driving of 30-in steel piles, at least five additional 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 others 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, at least one additional observer shall be deployed and 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. 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.

iv. 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 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 27, 2015.

**Donna S. Wieting,**

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

[FR Doc. 2015–21647 Filed 9–1–15; 8:45 am]

BILLING CODE 3510–22–P

## COMMISSION OF FINE ARTS

### Notice of Meeting

The next meeting of the U.S. Commission of Fine Arts is scheduled for 17 September 2015, at 9:00 a.m. in the Commission offices at the National Building Museum, Suite 312, Judiciary Square, 401 F Street NW., Washington, DC 20001–2728. Items of discussion may include buildings, parks and memorials.

Draft agendas and additional information regarding the Commission are available on our Web site: *www.cfa.gov.* Inquiries regarding the agenda and requests to submit written or oral statements should be addressed to Thomas Luebke, Secretary, U.S. Commission of Fine Arts, at the above address; by emailing *cfastaff@cfa.gov;* or by calling 202–504–2200. Individuals requiring sign language interpretation for the hearing impaired should contact the Secretary at least 10 days before the meeting date.

Dated: August 25, 2015, in Washington, DC.

**Thomas Luebke,**

*Secretary.*

[FR Doc. 2015–21548 Filed 9–1–15; 8:45 am]

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