



## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

[RTID 0648- XA677]

#### **Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to the U.S. Coast Guard's Base Los Angeles/ Long Beach Wharf Expansion Project, Los Angeles, California**

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

**ACTION:** Notice; issuance of an incidental harassment authorization.

**SUMMARY:** In accordance with the regulations implementing the Marine Mammal Protection Act (MMPA) as amended, notification is hereby given that NMFS has issued an incidental harassment authorization (IHA) to the U. S. Coast Guard (Coast Guard) to incidentally harass, by Level B harassment only, marine mammals during activities associated with the Base Los Angeles/ Long Beach Wharf Expansion Project in Los Angeles, California.

**DATES:** This Authorization is effective from February 1, 2021 through January 31, 2022.

**FOR FURTHER INFORMATION CONTACT:** Dwayne Meadows, Ph.D., Office of Protected Resources, NMFS, (301) 427-8401. Electronic copies of the application and supporting documents, as well as a list of the references cited in this document, may be obtained online at: <https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act>. In case of problems accessing these documents, please call the contact listed above.

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

The MMPA prohibits the “take” of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed incidental take authorization may be provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other “means of effecting the least practicable adverse impact” on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to in shorthand as “mitigation”); and requirements pertaining to the mitigation, monitoring and reporting of the takings are set forth.

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

### **Summary of Request**

On July 2, 2020, NMFS received an application from the Coast Guard requesting an IHA to take small numbers of five species of marine mammals incidental to pile driving associated with the Base Los Angeles Long Beach Wharf Expansion Project in Los Angeles, California. The application was deemed adequate and complete on October 5, 2020. The Coast Guard’s request is for take of a small number of five species of

marine mammals by Level A and/or Level B harassment. Neither the Coast Guard nor NMFS expects serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

### **Description of Specified Activity**

#### *Overview*

The purpose of the project is to expand the existing wharf and other base infrastructure for hosting two additional offshore patrol cutters. The existing 1255-foot (383 meters (m)) long by 30-foot (9 m) wide wharf will be extended 265 feet (81 m). The waterfront improvements also include repair of the bank erosion area and placement of small rocks for slope protection near the new onshore electrical substation. Specifically, construction work includes installing up to 102 pier support piles (16 to 30-inch diameter concrete piles) and 126 fender and corner protection piles (16 to 30-inch diameter concrete piles). Pile driving will be by impact hammering. Because of other permitting restrictions, in-water pile driving can only occur between September 1 and April 14, to avoid the nesting season of the California least tern. A detailed description of the planned project is provided in the **Federal Register** notice for the proposed IHA (85 FR 66939; October 21, 2020). Since that time, no changes have been made to the planned activities. Therefore, a detailed description is not provided here. Please refer to that **Federal Register** notice for the description of the specific activity.

### **Comments and Response**

A notice of NMFS's proposal to issue an IHA to the Coast Guard was published in the **Federal Register** on October 21, 2020 (85 FR 66939). That notice described, in detail, the Coast Guard's activity, the marine mammal species that may be affected by the activity, and the anticipated effects on marine mammals. During the 30-day public comment period, NMFS received public comment from one commenter. The U.S. Geological Survey noted they have "no comment to offer at this time". A comment letter

from the Marine Mammal Commission (Commission) was separately received pursuant to the Commission's authority to recommend steps it deems necessary or desirable to protect and conserve marine mammals (16 U.S.C. 1402.202(a)). We are obligated to respond to the Commission's recommendations within 120 days, and we do so below.

*Comment:* The Commission recommends that NMFS refrain from issuing renewals for any authorization unless it is consistent with the procedural requirements specified in section 101(a)(5)(D)(iii) of the MMPA.

*Response:* In prior responses to comments about IHA Renewals (*e.g.*, 84 FR 52464; October 02, 2019 and 85 FR 53342, August 28, 2020), NMFS has explained how the Renewal process, as implemented, is consistent with the statutory requirements contained in section 101(a)(5)(D) of the MMPA, and promotes NMFS' goals of improving conservation of marine mammals and increasing efficiency in the MMPA compliance process. Therefore, we intend to continue implementing the Renewal process.

*Comment:* The Commission recommends that NMFS reinforce that USCG must keep a running tally of the total Level A and B harassment takes for each species consistent with condition 4(j) of the final authorization.

*Response:* We agree that the USCG must ensure they do not exceed authorized takes but do not concur with the recommendation. NMFS is not responsible for ensuring that the USCG does not operate in violation of an issued IHA.

*Comment:* The Commission recommends that NMFS include in the final authorization the requirement that USCG conduct pile-driving activities during daylight hours only.

*Response:* We do not fully concur with the Commission's recommendation, or with their underlying justification, and do not adopt it as stated. While the USCG has no intention of conducting pile driving activities at night, it is unnecessary to preclude such activity should the need arise (*e.g.*, on an emergency basis or to complete driving of a pile

begun during daylight hours, should the construction operator deem it necessary to do so). We disagree with the statement that a prohibition on pile driving activity outside of daylight hours is necessary to meet the MMPA's least practicable adverse impact standard, and the Commission does not justify this assertion.

*Comment:* The Commission recommends that NMFS prioritize resolving the issue of the appropriate timeframes over which sound exposure levels should be accumulated when estimating the extents of the Level A harassment zones in the near future and consider incorporating animat modeling into its user spreadsheet.

*Response:* NMFS concurs with this recommendation and has prioritized the issue.

*Comment:* The Commission recommends that NMFS (1) specify why it has used a smaller source level reduction for bubble curtains from prior projects based on the same referenced data, (2) refrain from using the 5-decibel (dB) bubble curtain source level reduction factor for far-field impacts (>100 m) and (3) consult with acousticians, including those at the University of Washington-Applied Physics Laboratory, regarding the appropriate source level reduction factor, if any, to use to minimize far-field effects on marine mammals.

*Response:* NMFS does not agree with the Commission's assessment of bubble curtains. As is their right, the USCG wished to use a more conservative source level reduction for bubble curtains, their application reflected this desire, and we concurred that a 5 dB source level reduction was acceptable and we proposed this reduction.

NMFS does not agree with the Commission's assessment on bubble curtain efficacy that is based on near- and far-distance (referred as “near-field” and “far-field” by the Commission). Although the measured levels at far-distances (*i.e.*, >100 m) often show less differences from those measured near the source (*e.g.*, at 10 m), this is likely due to propagation effects that some of the sediment-borne acoustic energy that was not attenuated by the bubble curtain re-emerged into the water-column at much further

distances. However, this information should not be used to suggest that a different noise level reduction needs to be used for long-distance impact assessment. Since the applicant used a conservative practical spreading modeling (*i.e.*,  $15 \log(r)$ ), acoustic energy that is lost due to boundary refraction and reflection is not considered in determining the impact distances, and this loss is in addition to the practical spreading. Therefore, the small differences at far-distances between with and without bubble curtains indicates that the bubble curtain is less effective in attenuating additional acoustic energy beyond that within the water column. Further, NMFS has previously outlined our rationale for the bubble curtain source level reduction factor (*e.g.*, 84 FR 64833, November 25, 2019; 84 FR 28474, June 19, 2019) in response to a similar comment from the Commission.

*Comment:* The Commission recommends that NMFS work with USCG to ensure that the near-source hydrophone location is 10 m from the pile and the far-field hydrophone location(s) are 100–200 m from the pile.

*Response:* NMFS agrees that it is important to ensure adequate review of hydroacoustic monitoring plans before they are implemented by applicants. The USCG's request for proposals to contract the work for this project (which was announced before this IHA was proposed) does not specify exact distances or locations of hydrophones for the hydroacoustic monitoring. We will work with the USCG and their hydroacoustic monitoring contractor, within the constraints of USCG's contract, to achieve the best possible monitoring data.

*Comment:* The Commission recommends that NMFS authorize at least 38 Level A harassment takes of harbor seals based on the possibility that at least one seal could occur in the project area on each of the 38 days of proposed activities.

*Response:* We do not concur with the Commission's recommendation. As noted in our proposed authorizations, we typically estimate take based on the area of the harassment zone and the density of potentially taken species. As also noted in our

proposed authorizations, when density data are not available for a species (as is the case for harbor seals in this project area) we use proxy density or abundance data to help calculate take. Just as with density data, the proxies often result in fractional estimates of animals potentially affected per day of activity. As the Commission has been aware, our standard practice is to round estimates based on significant digits after calculating daily take, not to round to whole numbers of take each day as the Commission suggests. We do not round to whole numbers of take until the end of the series of calculations used to estimate take. Using those standard practices we arrived at an estimate of 19 takes of harbor seals.

The Commission also notes higher occurrences of harbor seals in areas far away from the project site (*i.e.*, survey zone 8). They raised this issue in their informal comments. As we told the Commission in our response to those informal comments, based on the numerous surveys in areas closer to the project area, and anecdotal evidence that the harbor seals located near the breakwall (such as zone 8) do not venture further into the harbor near the project area, we believe that the proposed 19 takes of harbor seals are sufficiently representative of take that may be expected to occur.

*Comment:* The Commission recommends that NMFS either (1) increase the number of takes of common dolphins from 200 to 280 if USCG intended to assume that one group of dolphins could be present each full week of activities and activities would occur only five days per week or (2) clarify that it assumed that one group of common dolphins would be present every 7 days rather than every full week of activities.

*Response:* We do not concur with the Commission's recommendation. The Commission raised this issue in their informal comments. The Commission mistakenly asserted we had used the term "work week" in our analysis and made an unsubstantiated assumption that construction activities would occur only 5 days per week and that our analysis depends on how many days per week an applicant is actually able to work (*e.g.*,

because of weather or mechanical issues, etc.). As noted in our informal comment response to the Commission, our take analysis assumed that one group of common dolphins would be present every 7 days of work and thus there is no need to change the number of takes of common dolphins.

### **Changes from the Proposed IHA to Final IHA**

We made minor clarifications in our standard language in the **Mitigation** section of this notice and in the IHA to reflect that because only impact hammering is being used, in some cases shutdown zones are larger than the Level B harassment and monitoring zones. Minor typographical errors were corrected.

### **Description of Marine Mammals in the Area of Specified Activities**

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history, of the potentially affected species. Additional information regarding population trends and threats may be found in NMFS's Stock Assessment Reports (SARs; <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>) and more general information about these species (*e.g.*, physical and behavioral descriptions) may be found on NMFS's website (<https://www.fisheries.noaa.gov/find-species>).

Table 1 lists all species or stocks for which take is expected and authorized for this action, and summarizes information related to the population or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. For taxonomy, we follow Committee on Taxonomy (2020). PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS's SARs). While no mortality is anticipated or authorized here, PBR

and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or the total number estimated within a particular study or survey area. NMFS’s stock abundance estimates for most species represent the total estimate of individuals within the geographic area, if known, that comprises that stock. For some species, this geographic area may extend beyond U.S. waters. All managed stocks in this region are assessed in NMFS’s U.S. Pacific SARs (e.g., Carretta *et al.* 2020).

**Table 1. Species That Spatially Co-occur with the Activity to the Degree That Take Is Reasonably Likely to Occur**

Common name	Scientific name	Stock	ESA/MMPA status; Strategic (Y/N) <sup>1</sup>	Stock abundance (CV, N <sub>min</sub> , most recent abundance survey) <sup>2</sup>	PBR	Annual M/SI <sup>3</sup>
Order Cetartiodactyla – Cetacea – Superfamily Mysticeti (baleen whales)						
Family Eschrichtiidae						
Gray Whale	<i>Eschrichtius robustus</i>	Eastern North Pacific	-, -, N	26,960 (0.05, 25,849, 2016)	801	138
Order Cetartiodactyla – Cetacea – Superfamily Odontoceti (toothed whales, dolphins, and porpoises)						
Family Delphinidae						
Bottlenose Dolphin	<i>Tursiops truncatus</i>	California Coastal	-, -, N	453 (0.06, 346, 2011)	2.7	>2.0
Short-beaked common dolphin	<i>Delphinus delphis</i>	California/Oregon/Washington	-, -, N	969,861 (0.17, 839,325, 2016)	8,393	≥40
Order Carnivora – Superfamily Pinnipedia						
Family Otariidae (eared seals and sea lions)						
California Sea Lion	<i>Zalophus californianus</i>	United States	-, -, N	257,606 (N/A, 233,515, 2014)	14,011	>321
Family Phocidae (earless seals)						
Harbor seal	<i>Phoca vitulina</i>	California	-, -, N	30,968 (N/A, 27,348, 2012)	1,641	43

1 - Endangered Species Act (ESA) status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.  
2- NMFS marine mammal stock assessment reports online at: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>. CV is coefficient of variation; Nmin is the minimum estimate of stock abundance.  
3 - These values, found in NMFS's SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial fisheries, ship strike). Annual Mortality/Serious Injury (M/SI) often cannot be determined precisely and is in some cases presented as a minimum value or range. A CV associated with estimated mortality due to commercial fisheries is presented in some cases.

California sea lion, harbor seal, and bottlenose dolphin spatially co-occur with the activity to the degree that take is reasonably likely to occur, and we have authorized take of these species. Short-beaked common dolphin and gray whale occurrence and density is such that take is possible, and we have authorized take of these species also. A detailed description of the species likely to be affected by the project, including brief introductions to the species and relevant stocks as well as available information regarding population trends and threats, and information regarding local occurrence, were provided in the Federal Register notice for the proposed IHA (85 FR 66939; October 21, 2020); since that time, we are not aware of any changes in the status of these species and stocks; therefore, detailed descriptions are not provided here. Please refer to that Federal Register notice for these descriptions. Please also refer to NMFS' website (<https://www.fisheries.noaa.gov/find-species>) for generalized species accounts.

### **Potential Effects of Specified Activities on Marine Mammals and their Habitat**

The effects of underwater noise from the Coast Guard's construction activities have the potential to result in behavioral harassment of marine mammals in the vicinity of the survey area. The notice of proposed IHA (85 FR 66939; October 21, 2020) included a discussion of the effects of anthropogenic noise on marine mammals and the potential effects of underwater noise from the Coast Guard's construction activities on marine mammals and their habitat. That information and analysis is incorporated by reference into this final IHA determination and is not repeated here; please refer to the notice of proposed IHA (85 FR 66939; October 21, 2020).

### **Estimated Take**

This section provides an estimate of the number of incidental takes authorized through this IHA, which will inform both NMFS' consideration of "small numbers" and the negligible impact determination.

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

Authorized takes would be by Level B harassment, as use of the acoustic source (*i.e.*, impact pile driving) has the potential to result in disruption of behavioral patterns for individual marine mammals. There is also some potential for auditory injury (Level A harassment) to result for gray whales and harbor seals because predicted auditory injury zones are larger. The mitigation and monitoring measures are expected to minimize the severity of the taking to the extent practicable.

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

Generally speaking, we estimate take by considering: (1) acoustic thresholds above which NMFS believes the best available science indicates marine mammals will be behaviorally harassed or incur some degree of permanent hearing impairment; (2) the area or volume of water that will be ensonified above these levels in a day; (3) the density or occurrence of marine mammals within these ensonified areas; and, (4) the number of days of activities. We note that while these basic factors can contribute to a basic calculation to provide an initial prediction of takes, additional information that can qualitatively inform take estimates is also sometimes available (*e.g.*, previous monitoring

results or average group size). NMFS relied on local occurrence data and group size to estimate take. Below, we describe the factors considered here in more detail and present the take estimate.

### *Acoustic Thresholds*

Using the best available science, NMFS has developed acoustic thresholds that identify the received level of underwater sound above which exposed marine mammals would be reasonably expected to be behaviorally harassed (equated to Level B harassment) or to incur PTS of some degree (equated to Level A harassment).

*Level B Harassment for non-explosive sources* – Though significantly driven by received level, the onset of behavioral disturbance from anthropogenic noise exposure is also informed to varying degrees by other factors related to the source (*e.g.*, frequency, predictability, duty cycle), the environment (*e.g.*, bathymetry), and the receiving animals (hearing, motivation, experience, demography, behavioral context) and can be difficult to predict (Southall *et al.*, 2007, Ellison *et al.*, 2012). Based on what the available science indicates and the practical need to use a threshold based on a factor that is both predictable and measurable for most activities, NMFS uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS predicts that marine mammals are likely to be behaviorally harassed in a manner we consider Level B harassment when exposed to underwater anthropogenic noise above received levels of 120 dB re 1 (micro Pascal)  $\mu\text{Pa}$  root mean square (rms) for continuous (*e.g.*, vibratory pile-driving) and above 160 dB re 1  $\mu\text{Pa}$  (rms) for non-explosive impulsive (*e.g.*, impact pile driving) or intermittent (*e.g.*, scientific sonar) sources.

The Coast Guard's proposed activity includes the use of impulsive (impact pile-driving) sources, and therefore the 160 dB re 1  $\mu\text{Pa}$  (rms) threshold is applicable.

*Level A harassment for non-explosive sources* - NMFS' Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0)

(Technical Guidance, 2018) identifies dual criteria to assess auditory injury (Level A harassment) to five different marine mammal groups (based on hearing sensitivity) as a result of exposure to noise from two different types of sources (impulsive or non-impulsive). The Coast Guard’s activity includes the use of impulsive (impact pile-driving) sources.

These thresholds are provided in Table 2. The references, analysis, and methodology used in the development of the thresholds are described in NMFS 2018 Technical Guidance, which may be accessed at

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance>.

**Table 2. Thresholds Identifying the Onset of Permanent Threshold Shift**

Hearing Group	PTS Onset Acoustic Thresholds* (Received Level)	
	Impulsive	Non-impulsive
Low-Frequency (LF) Cetaceans	<i>Cell 1</i> $L_{pk,flat}$ : 219 dB $L_{E,LF,24h}$ : 183 dB	<i>Cell 2</i> $L_{E,LF,24h}$ : 199 dB
Mid-Frequency (MF) Cetaceans	<i>Cell 3</i> $L_{pk,flat}$ : 230 dB $L_{E,MF,24h}$ : 185 dB	<i>Cell 4</i> $L_{E,MF,24h}$ : 198 dB
High-Frequency (HF) Cetaceans	<i>Cell 5</i> $L_{pk,flat}$ : 202 dB $L_{E,HF,24h}$ : 155 dB	<i>Cell 6</i> $L_{E,HF,24h}$ : 173 dB
Phocid Pinnipeds (PW) (Underwater)	<i>Cell 7</i> $L_{pk,flat}$ : 218 dB $L_{E,PW,24h}$ : 185 dB	<i>Cell 8</i> $L_{E,PW,24h}$ : 201 dB
Otariid Pinnipeds (OW) (Underwater)	<i>Cell 9</i> $L_{pk,flat}$ : 232 dB $L_{E,OW,24h}$ : 203 dB	<i>Cell 10</i> $L_{E,OW,24h}$ : 219 dB

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

Note: Peak sound pressure ( $L_{pk}$ ) has a reference value of 1  $\mu$ Pa, and cumulative sound exposure level ( $L_E$ ) has a reference value of 1  $\mu$ Pa<sup>2</sup>s. In this Table, thresholds are abbreviated to reflect American National Standards Institute standards (ANSI 2013). However, peak sound pressure is defined by ANSI as incorporating frequency weighting, which is not the intent for this Technical Guidance. Hence, the subscript “flat” is being included to indicate peak sound pressure should be flat weighted or unweighted within the generalized hearing range. The subscript associated with cumulative sound exposure level thresholds indicates the designated marine mammal auditory weighting function (LF, MF, and HF

cetaceans, and PW and OW pinnipeds) and that the recommended accumulation period is 24 hours. The cumulative sound exposure level thresholds could be exceeded in a multitude of ways (*i.e.*, varying exposure levels and durations, duty cycle). When possible, it is valuable for action proponents to indicate the conditions under which these acoustic thresholds will be exceeded.

### *Ensonified Area*

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

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

An impact hammer would be used to place the pile at its intended depth through rock or harder substrates. An impact hammer is a steel device that works like a piston, producing a series of independent strikes to drive the pile. Impact hammering typically generates the loudest noise associated with pile installation. The actual durations of each installation method vary depending on the type and size of the pile.

In order to calculate distances to the Level A harassment and Level B harassment sound thresholds for piles of various sizes being used in this project, NMFS used acoustic monitoring data from other locations to develop source levels for the various pile sizes and methods (see Table 3). Data are provided for 16 and 30-inch concrete piles that are the extremes of the possible range of sizes. As noted above, the Coast Guard will use a bubble curtain to reduce sounds from pile driving. A 5dB reduction is applied to the source levels for calculating distances to the Level A harassment and Level B harassment sound thresholds. This is a conservative reduction based on several studies including CALTRANS (2015) and Austin *et al.* (2016).

### **Table 3. Project Sound Source Levels**

Pile Driving Activity		Estimated sound source level at 10 meters without attenuation			Data Source
Hammer Type	Pile Type	dB RMS	dB SEL	dB peak	
Impact	16-inch concrete	166	155	185	CALTRANS (2015) (Table I.2-1, 18-inch concrete)
Impact	30-inch concrete	176	166	200	CALTRANS (2015) (Table I.2-3)

Note: RMS = root mean square, SEL = single strike sound exposure level; dB peak = peak sound level. A 5-db reduction for use of a bubble curtain reduces these source levels when calculating isopleth distances below.

### *Level B Harassment Zones*

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

$$TL = B * \text{Log}_{10} (R1/R2), \text{ where}$$

TL = transmission loss in dB

B = transmission loss coefficient; for practical spreading equals 15

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

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

The recommended TL coefficient for most nearshore environments is the practical spreading value of 15. This value results in an expected propagation environment that would lie between spherical and cylindrical spreading loss conditions, which is the most appropriate assumption for the Coast Guard's activity.

Using the practical spreading model, the Coast Guard determined underwater noise would fall below the behavioral effects threshold for marine mammals at distances no greater than 55 m with an effective source level of 171 dB rms for the 30-inch piles

(Table 4). This distance determines the maximum Level B harassment zone for the project.

**Table 4. Calculated Distances (meters) to Level B Harassment Isopleths (m) for each Pile Type**

Pile Type	Level B Isopleth (m)
16-inch concrete	12
30-inch concrete	55

#### *Level A Harassment Zones*

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

Inputs used in the User Spreadsheet (Table 5), and the resulting isopleths are reported below (Table 6) for each of the pile types.

**Table 5. NMFS Technical Guidance User Spreadsheet Input to Calculate Level A Isopleths**

Pile Type	Piles/Day	Strikes per Pile*	Days of Pile Driving**
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16-inch concrete	6	1564 strikes	17
30-inch concrete	6	1748 strikes	21 or 30

Note: Propagation loss coefficient is 15LogR and Weighting Factor Adjustment is 2 for all cells.

\* Strikes per pile are an estimate from a geotechnical report for the project (TCG, 2019).

\*\* Days depends on size of pile ultimately used for wharf support. Take will be calculated using largest zones (30 inch piles) and longest duration (38 days using 16 inch support piles and 30-inch fender and corner piles).

The above input scenarios lead to PTS isopleth distances (Level A thresholds) of 1 to 194.6 meters (3 to 639 feet), depending on the marine mammal group and scenario (Table 7). Note that the Level A harassment isopleths are larger than the level B harassment isopleths for the low-frequency and high-frequency cetaceans and the phocid pinnipeds because of the large number of piles and strikes per day and use of only an impact hammer.

**Table 6. Calculated Distances (meters) to Level A Harassment Isopleths (m) for each Hearing Group and Pile Type**

Pile Type	Low-Frequency Cetaceans (meters)	Mid-Frequency Cetaceans (meters)	High-Frequency Cetaceans (meters)	Phocid Pinnipeds (meters)	Otariid Pinnipeds (meters)
16-inch concrete	28.0	1	33.4	15	1.1
30-inch concrete	163.4	5.8	194.6	87.4	6.4

Note: a 10-meter shutdown zone will be implemented for all species and activity types to prevent direct injury of marine mammals.

### *Marine Mammal Occurrence and Take Calculation and Estimation*

In this section we provide the information about the presence, abundance, or group dynamics of marine mammals that will inform the take calculations. Density data in the port and harbor does not exist for any species, but as described above, there are three baseline biological surveys since 2000 (MEC, 2002; SAIC, 2010; MBC, 2016) that provide observations in over 30 defined zones within the harbor, three of which are near the ensonified area of the project and are used to estimate take.

Here we describe how the information provided above is brought together to produce a quantitative take estimate. Take by Level A and Level B harassment is summarized in Table 7.

#### *Gray Whale*

Because live gray whales were not sighted during the baseline surveys (see above), but are periodically known from the harbor, and the Level A harassment and shutdown zone radius is 170 m (656 feet), we authorize two Level A harassment takes (Table 7) for inadvertent takes of animals that could enter the shutdown zone undetected or before shutdown could be implemented. Because the Level A harassment and shutdown zones are larger than the Level B harassment zone, we do not authorize take by Level B harassment, but recognize animals could also inadvertently enter the smaller Level B harassment zone after already being recorded as Level A harassment within the larger Level A harassment zone.

#### *Bottlenose Dolphin*

The highest observation on any given day in the three zones surrounding the Coast Guard Base from the three biological baseline surveys (MEC, 2002; SAIC, 2010; MBC, 2016) is 12. Given the small zone size relative to the study area an expected number of three animals in the project area per day is a reasonable representation of daily occurrence for the species. Given a maximum pile driving period of 38 days, 3 animals per day would equate a take of 114 incidents of Level B harassment. Based on the above, we conservatively authorize 114 Level B harassment takes of bottlenose dolphins (Table 7). Because the Level A harassment and shutdown zones are very small and we believe the protected species observer (PSO) will be able to effectively monitor and implement the shutdown zones, we do not authorize take by Level A harassment.

#### *Short-beaked Common Dolphin*

Observations during biological surveys in 2013 through 2014 included one pod of 40 individuals in the Los Angeles Main Channel where the project occurs (MBC, 2016). This number of individuals is highly unlikely to be present in the project area on a daily basis. We conservatively assume one pod of 40 could be present each full week. Given a maximum pile driving period of 38 days, this would equate to 5 full weeks or 200 takes through Level B harassment. Based on the above, we authorize 200 Level B harassment takes of short-beaked common dolphins (Table 7). Because the Level A harassment and shutdown zones are very small and we believe the PSO will be able to effectively monitor and implement the shutdown zones, we do not authorize take by Level A harassment.

#### *California Sea Lion*

The highest observation on any given day in the three zones surrounding the Coast Guard Base from the three biological baseline surveys (MEC, 2002; SAIC, 2010; MBC, 2016) is 65 sea lions. Given the small zone size relative to the study area an expected number of 10 animals in the project area per day is a reasonable representation of daily occurrence for the species. Given a maximum pile driving period of 38 days, 10 animals per day would equate to 380 incidents of Level B harassment. Based on the above, we authorize 380 Level B harassment takes of California sea lions (Table 7). Because the Level A harassment and shutdown zones are very small and we believe the PSO will be able to effectively monitor and implement the shutdown zones, we do not authorize take by Level A harassment.

#### *Harbor Seal*

The highest observation on any given day in the three zones surrounding the Coast Guard Base from the three biological baseline surveys (MEC, 2002; SAIC, 2010; MBC, 2016) is 1 seal. The Level A harassment zone for this species is 90 m (295 feet), however the Coast Guard proposed a smaller shutdown zone to minimize work

stoppages. We are authorizing a shutdown zone of 55 m (180 feet, see **Mitigation** section below) that coincides with the size of the Level B harassment zone for ease of implementation. It is conservatively estimated that 0.5 animals per day might enter the shutdown zone or Level A harassment zone between 55 and 90 m (180 -295 feet). Given a maximum pile driving period of 38 days, this would equate to a take of 19 individuals through Level A harassment (Table 7). Because the Level A harassment and shutdown zones are larger than the Level B harassment zone, we do not authorize take by Level B harassment, but recognize animals could also enter the smaller Level B harassment zone after already being recorded within the larger Level A harassment zone.

**Table 7. Authorized Amount of Taking, by Level A and Level B Harassment, by Species and Stock and Percent of Take by Stock**

Species	Authorized Take		Percent of Stock
	Level B	Level A	
Harbor seal ( <i>Phoca vitulina</i> ) California Stock	0	19	< 0.1
California sea lion ( <i>Zalophus californianus</i> ) U.S. Stock	380	0	0.2
Gray whale ( <i>Eschrichtius robustus</i> ) Eastern North Pacific Stock	0	2	< 0.1
Common bottlenose dolphin ( <i>Tursiops truncatus</i> ) California Coastal Stock	114	0	25.2
Short-beaked common dolphin ( <i>Delphinus delphis</i> ) California/Oregon /Washington Stock	200	0	< 0.1

### **Mitigation**

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses (latter not applicable for this action). NMFS regulations require applicants for incidental take

authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, as well as subsistence uses where applicable, we carefully consider two primary factors:

(1) The manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), the likelihood of effective implementation (probability implemented as planned); and

(2) The practicability of the measures for applicant implementation, which may consider such things as cost, impact on operations, and, in the case of a military readiness activity, personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity.

The following mitigation measures are authorized in the IHA:

- For in-water heavy machinery work other than pile driving, if a marine mammal comes within 10 m, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions. This type of work could include the following activities: (1) Movement of the barge to the pile location; or (2) positioning of the pile on the substrate via a crane (*i.e.*, stabbing the pile);

- Conduct briefings between construction supervisors and crews and the marine mammal monitoring team prior to the start of all pile driving activity and when new personnel join the work, to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures;
- For those marine mammals for which Level A or B harassment take has not been requested, in-water pile installation/removal (if necessary) will shut down immediately if such species are observed within or entering the Level A or B harassment zone; and
- If take reaches the authorized limit for an authorized species, pile installation will be stopped as these species approach the Level A or B harassment zone to avoid additional take.

The following mitigation measures would apply to the Coast Guard's in-water construction activities.

- *Establishment of Shutdown Zones*- The Coast Guard will establish shutdown zones for all pile driving activities. The purpose of a shutdown zone is generally to define an area within which shutdown of the activity would occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). Shutdown zones will vary based on the activity type and marine mammal hearing group (Table 8). Shutdown zones are rounded up to the next 10 m from the largest Level A harassment zones in Table 7, except in the case of the phocid group where the shutdown zone is reduced to the same size as the largest Level B harassment zone (55 m) and the applicant has requested the authorization of Level A harassment takes for the area within the Level A harassment one and outside the shutdown zone;
- *PSOs*- The placement of PSOs during all pile driving activities (described in detail in the **Monitoring and Reporting** section) will ensure that the entire

shutdown zone is visible during pile installation. Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (*e.g.*, fog, heavy rain), pile driving and removal must be delayed until the PSO is confident marine mammals within the shutdown zone could be detected;

**Table 8. Shutdown Zones**

Pile Type	Low-Frequency Cetaceans (meters)	Mid-Frequency Cetaceans (meters)	High-Frequency Cetaceans (meters)	Phocid Pinnipeds (meters)	Otariid Pinnipeds (meters)
16-inch concrete	30	10	40	20	10
30-inch concrete	170	10	200	55	10

- Monitoring for Level A and B Harassment-* The Coast Guard will monitor the Level A and B harassment zones. Monitoring zones provide utility for observing by establishing monitoring protocols for areas adjacent to the shutdown zones. Monitoring zones enable observers to be aware of and communicate the presence of marine mammals in the project area outside the shutdown zone and thus prepare for a potential halt of activity should the animal enter the shutdown zone. Placement of PSOs will allow PSOs to observe marine mammals within the Level B harassment zones;
- Pre-activity Monitoring-* Prior to the start of daily in-water construction activity, or whenever a break in pile driving/removal of 30 minutes or longer occurs, PSOs will observe the shutdown and monitoring zones for a period of 30 minutes. The shutdown zone will be considered cleared when a marine mammal has not been observed within the zone for that 30-minute period. If a marine mammal is observed within the shutdown zone, a soft-start cannot proceed until the animal has left the zone or has not been observed for 15 minutes. When a marine

mammal for which Level B harassment take is authorized is present in the Level B harassment zone, activities may begin and Level B harassment take will be recorded. If the entire Level B harassment zone is not visible at the start of construction, pile driving activities can begin. If work ceases for more than 30 minutes, the pre-activity monitoring of the shutdown zones will be required;

- *Soft Start*- Soft-start procedures are believed to provide additional protection to marine mammals by providing warning and/or giving marine mammals a chance to leave the area prior to the hammer operating at full capacity. For impact pile driving, contractors will be required to provide an initial set of three strikes from the hammer at reduced energy, followed by a 30-second waiting period. This procedure will be conducted three times before impact pile driving begins. Soft start will be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of 30 minutes or longer;
- *Bubble Curtain*- The Coast Guard is required to employ a bubble curtain during all impact pile driving and operate it in a manner consistent with the following performance standards: (1) The bubble curtain must distribute air bubbles around 100 percent of the piling perimeter for the full depth of the water column; (2) The lowest bubble ring must be in contact with the mudline for the full circumference of the ring, and the weights attached to the bottom ring shall ensure 100 percent mudline contact. No parts of the ring or other objects shall prevent full mudline contact; and (3) Air flow to the bubblers must be balanced around the circumference of the pile;
- *Hydroacoustic monitoring*- The Coast Guard is required to conduct hydroacoustic monitoring of at least two piles of each pile diameter; and
- Pile driving is planned to occur during daylight hours.

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

### **Monitoring and Reporting**

In order to issue an IHA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of such taking. The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the action area. Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

- Occurrence of marine mammal species or stocks in the area in which take is anticipated (*e.g.*, presence, abundance, distribution, density);
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.*, source characterization, propagation, ambient noise); (2) affected species (*e.g.*, life history, dive patterns); (3) co-occurrence of marine mammal species with the action; or (4) biological or behavioral context of exposure (*e.g.*, age, calving or feeding areas);

- Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors;
- How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2) populations, species, or stocks;
- Effects on marine mammal habitat (*e.g.*, marine mammal prey species, acoustic habitat, or other important physical components of marine mammal habitat); and
- Mitigation and monitoring effectiveness.

### *Visual Monitoring*

Marine mammal monitoring must be conducted in accordance with the Monitoring section of the application and section 5 of the IHA. Marine mammal monitoring during pile driving must be conducted by NMFS-approved PSOs in a manner consistent with the following:

- Independent PSOs (*i.e.*, not construction personnel) who have no other assigned tasks during monitoring periods must be used;
- At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
- Other PSOs may substitute education (degree in biological science or related field) or training for experience; and
- The Coast Guard must submit PSO Curriculum Vitae for approval by NMFS prior to the onset of pile driving.

PSOs must have the following additional qualifications:

- Ability to conduct field observations and collect data according to assigned protocols;

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

One PSO will be employed. PSO location will provide an unobstructed view of all water within the shutdown and Level A and Level B harassment zones.

Monitoring will be conducted 30 minutes before, during, and 30 minutes after pile driving/removal 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 or removed. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving or drilling equipment is no more than 30 minutes.

### *Reporting*

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

a narrative regarding marine mammal sightings, and associated PSO data sheets.

Specifically, the report must include:

- Dates and times (begin and end) of all marine mammal monitoring;
- Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed and by what method (*i.e.*, impact or vibratory);
- Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance (if less than the harassment zone distance);
- The number of marine mammals observed, by species, relative to the pile location and if pile driving or removal was occurring at time of sighting;
- Age and sex class, if possible, of all marine mammals observed;
- PSO locations during marine mammal monitoring;
- Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile driving or removal was occurring at time of sighting);
- Description of any marine mammal behavior patterns during observation, including direction of travel and estimated time spent within the Level A and Level B harassment zones while the source was active;
- Number of marine mammals detected within the harassment zones, by species.
- Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any;

- Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals;
- Submit all PSO datasheets and/or raw sighting data (in a separate file from the Final Report referenced immediately above).

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

*Hydroacoustic Monitoring and Reporting* - The Coast Guard will monitor the driving of at least two piles of each diameter. As part of the above-mentioned report, or in a separate report with the same timelines as above, the Coast Guard will provide an acoustic monitoring report for this work. The acoustic monitoring report must, at minimum, include the following:

- Hydrophone equipment and methods: recording device, sampling rate, distance (m) from the pile where recordings were made; depth of recording device(s);
- Type of pile being driven, substrate type, method of driving during recordings, and if a sound attenuation device is used;
- For impact pile driving: Pulse duration and mean, median, and maximum sound levels (dB re: 1 $\mu$ Pa): cumulative sound exposure level (SEL<sub>cum</sub>), peak sound pressure level (SPL<sub>peak</sub>), and single-strike sound exposure level (SEL<sub>s-s</sub>); and
- Number of strikes per pile measured, one-third octave band spectrum and power spectral density plot.

#### *Reporting Injured or Dead Marine Mammals*

In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Coast Guard shall report the incident to the Office of Protected Resources (OPR), NMFS and to the regional stranding coordinator as soon as

feasible. If the death or injury was clearly caused by the specified activity, the Coast Guard must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the IHA. The IHA-holder must not resume their activities until notified by NMFS. The report must include the following information:

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

### **Negligible Impact Analysis and Determination**

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be “taken” through harassment, NMFS considers other factors, such as the likely nature of any responses (*e.g.*, intensity, duration), the context of any responses (*e.g.*, critical reproductive time or location, migration), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status.

Consistent with the 1989 preamble for NMFS's implementing regulations (54 FR 40338; September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the environmental baseline (*e.g.*, as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

To avoid repetition, this introductory discussion of our analyses applies to all of the species listed in 7, given that many of the anticipated effects of this project on different marine mammal stocks are expected to be relatively similar in nature. Pile driving activities have the potential to disturb or displace marine mammals. Specifically, the project activities may result in take, in the form of Level A harassment and Level B harassment from underwater sounds generated from pile driving. Potential takes could occur if individuals are present in the ensonified zone when these activities are underway.

The takes from Level A and Level B harassment would be due to potential behavioral disturbance, TTS, and PTS. No mortality is anticipated given the nature of the activity and measures designed to minimize the possibility of injury to marine mammals. The potential for harassment is minimized through the construction method and the implementation of the planned mitigation measures (see **Mitigation** section).

The Level A harassment zones identified in Table 6 are based upon an animal exposed to impact pile driving multiple piles per day. Considering duration of impact driving each pile (up to 45 minutes) and breaks between pile installations (to reset equipment and move pile into place), this means an animal would have to remain within the area estimated to be ensonified above the Level A harassment threshold for multiple hours. This is highly unlikely given marine mammal movement throughout the area. So while the take we are proposing to authorize is expected to occur, if an animal was exposed to accumulated sound energy, the resulting PTS would likely be small (*e.g.*, PTS

onset) at lower frequencies where pile driving energy is concentrated, and unlikely to result in impacts to individual fitness, reproduction, or survival.

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

Behavioral responses of marine mammals to pile driving at the project site, if any, are expected to be mild and temporary. Marine mammals within the Level B harassment zone may not show any visual cues they are disturbed by activities (as noted during modification to the Kodiak Ferry Dock; see *Behavioral Harassment* section of the **Federal Register** notice for the proposed IHA (85 FR 66939; October 21, 2020)) or could become alert, avoid the area, leave the area, or display other mild responses that are not observable such as changes in vocalization patterns. Given the short duration of noise-generating activities per day and that pile driving and removal would occur across a few weeks, any harassment would be temporary. There are no other areas or times of known biological importance for any of the affected species.

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

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

- No mortality is anticipated or authorized;
- Authorized Level A harassment would be very small amounts and of low degree;
- No biologically important areas have been identified within the project area;
- For all species, the project area is a very small, human-altered and peripheral part of their range;
- The Coast Guard would implement mitigation measures such soft-starts, bubble curtain, and shut downs; and
- Monitoring reports from similar work in the ports have documented little to no effect on individuals of the same species impacted by the specified activities.

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

### **Small Numbers**

As noted above, only small numbers of incidental take may be authorized under section 101(a)(5)(D) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the number of individuals taken to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. When the

predicted number of individuals to be taken is fewer than one third of the species or stock abundance, the take is considered to be of small numbers. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

The amount of take NMFS authorizes of all species or stocks is below one third of the estimated stock abundance. These are all likely conservative estimates of individuals taken because they assume all takes are of different individual animals which is likely not the case. Some individuals may return multiple times in a day, but PSOs would count them as separate takes if they cannot be individually identified.

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

### **Unmitigable Adverse Impact Analysis and Determination**

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

### **National Environmental Policy Act**

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

This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NOAA Administrative Order 216-6A, which do not individually or

cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has determined that the issuance of the IHA qualifies to be categorically excluded from further NEPA review.

### **Endangered Species Act (ESA)**

Section 7(a)(2) of the ESA (16 U.S.C. 1531 *et seq.*) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat.

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

### **Authorization**

NMFS has issued an IHA to the Coast Guard for the potential harassment of small numbers of five marine mammal species incidental to the Base Los Angeles/Long Beach Wharf Expansion project in Los Angeles, California, provided the previously mentioned mitigation, monitoring and reporting requirements are followed.

Dated: December 7, 2020.

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Donna S. Wieting,  
Director, Office of Protected Resources,  
National Marine Fisheries Service.