



BILLING CODE 3510-22-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XF411

Taking of Marine Mammals Incidental to Specified Activities; Dismantling of the Original East Span of the San Francisco-Oakland Bay Bridge

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 the NMFS has issued an incidental harassment authorization (IHA) to the California Department of Transportation (CALTRANS) to take small numbers of six species of marine mammals, by harassment, incidental to the dismantling of the original East Span of the San Francisco-Oakland Bay Bridge (SFOBB) in the San Francisco Bay (SFB), California.

DATES: This IHA will be valid from September 1, 2017, through August 31, 2018.

FOR FURTHER INFORMATION CONTACT: Dale Youngkin, Office of Protected Resources, NMFS, (301) 427-8401. Electronic copies of the application and supporting documents, as well as a list of references cited in this document, may be obtained at www.nmfs.noaa.gov/pr/permits/incidental/construction.htm. In case of problems accessing these documents, please call the contact listed above.

SUPPLEMENTARY INFORMATION:

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.

An 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.

The MMPA states that the term "take" means to harass, hunt, capture, kill, or attempt to harass, hunt, capture, or kill any marine mammal.

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 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).

National Environmental Policy Act (NEPA)

NMFS prepared an Environmental Assessment (EA) for the take of marine mammals incidental to construction of the East Span of the SFOBB and made a Finding of No Significant Impact (FONSI) on November 4, 2003. Due to the modification of part of the construction project and the mitigation measures, NMFS reviewed additional information from CALTRANS regarding empirical measurements of pile driving noises for the smaller temporary piles without an air bubble curtain system and the use of vibratory pile driving. NMFS prepared a Supplemental Environmental Assessment (SEA) and analyzed the potential impacts to marine mammals that would result from the modification of the action. A FONSI was signed on August 5, 2009. In addition, for CALTRANS' Piers E4 and E5 demolition using controlled implosion, NMFS prepared an SEA and analyzed the potential impacts to marine mammals that would result from the modification. A FONSI was signed on September 3, 2015. The proposed activity and expected impacts remain within what was previously analyzed in the EA and SEAs. Therefore, no additional NEPA analysis is warranted. A copy of the SEA and FONSI is available at www.nmfs.noaa.gov/pr/permits/incidental/construction.htm. In case of problems accessing these documents, please call the contact listed above.

Summary of Request

On April 5, 2017, CALTRANS submitted a request to NMFS for an IHA to take marine mammals incidental to the dismantling of the original East Span of the SFOBB in the San Francisco Bay. On May 1, 2017, NMFS deemed the application adequate and

complete. CALTRANS requested authorization for incidental take by harassment only and NMFS concurs that mortality is not expected to result from this activity. NMFS is proposing to issue an IHA that will authorize take by Level B harassment of Pacific harbor seal, California sea lion, northern elephant seal, northern fur seal, harbor porpoise, and bottlenose dolphin incidental to CALTRANS' activities. As described in the Overview section, previous IHAs have been issued to CALTRANS for similar activities, specifically for the use of mechanical dismantling and controlled blasts to implode piers of the original East Span of the SFOBB.

Description of the Specified Activity

Overview

CALTRANS proposes removal of the original East Span of the SFOBB by mechanical dismantling and by use of controlled charges to implode 13 piers (Piers E6-E18) into their open cellular chambers below the mudline. Activities associated with dismantling the original East Span may potentially result in incidental take of marine mammals due to the use of highly controlled charges to dismantle the marine foundations of the piers.

Several previous one-year IHAs have been issued to CALTRANS for pile driving/removal and construction of the new SFOBB East Span beginning in 2003. NMFS has issued 10 IHAs to CALTRANS for the SFOBB Project. The first five IHAs (2003, 2005, 2007, 2009, and 2011) addressed potential impacts associated with pile driving for the construction of the new East Span of the SFOBB. IHAs issued in 2013, 2014 and July 2015 addressed activities associated with both constructing the new East Span and dismantling the original East Span, specifically addressing vibratory pile

driving, vibratory pile extraction/removal, attenuated impact pile driving, pile proof testing, and mechanical dismantling of temporary and permanent marine foundations. On September 9, 2015, NMFS issued an IHA to CALTRANS for incidental take associated with the demolition of Pier E3 of the original SFOBB by highly controlled explosives (80 FR 57584, September 24, 2015). On September 30, 2016, NMFS issued an IHA authorizing the incidental take of marine mammals associated with both pile driving/removal and controlled implosion of Piers E4 and E5 (81 FR 67313). CALTRANS is requesting this IHA to continue dismantling the original East Span of the SFOBB using mechanical means as well as five to six implosion events to dismantle 13 piers (Piers E6-E18). CALTRANS does not anticipate any further in-water pile installation or pile removal for the SFOBB project, and is not requesting coverage under this IHA to conduct pile driving/removal activities.

A detailed description of the planned SFOBB dismantling project is provided in the *Federal Register* notice for the proposed IHA (82 FR 26063, June 6, 2017). 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 Responses

A notice of NMFS' proposal to issue an IHA to CALTRANS for the SFOBB project was published in the *Federal Register* on June 6, 2017 (82 FR 26063). That notice described, in detail, CALTRANS' 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 only one pertinent comment letter, from the Marine Mammal Commission (Commission).

Comment 1: The Commission concurs with NMFS' preliminary finding and recommends that NMFS issue the incidental harassment authorization, subject to the inclusion of the proposed mitigation, monitoring, and reporting measures.

Response: NMFS thanks the Commission for its comment and concurs with the Commission's recommendations. NMFS has issued the IHA to CALTRANS.

Description of Marine Mammals in the Area of the Specified Activity

A detailed description of the species likely to be affected by CALTRANS' SFOBB 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 (82 FR 26063, June 6, 2017). Since that time, we are not aware of any changes in the status of those species and stocks that would affect our analyses or determinations; therefore, detailed descriptions are not provided here.

Table 1 lists all species and stocks with potential for occurrence in the San Francisco Bay and summarizes information related to the species or stock, including potential biological removal (PBR). Since the time of the proposed IHA, NMFS' SARs have been updated and finalized; however, there were no changes for the marine mammal species or stocks with potential for occurrence in the San Francisco Bay. For taxonomy, we follow Committee on Taxonomy (2016). 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. PBR is considered in concert with the known sources of ongoing anthropogenic mortality to assess the population-level effects of the anticipated mortality from a specific project (as described in NMFS’s SARs). While no mortality is anticipated or authorized here, PBR information is included here as a gross indicator of the status of the species and other threats. Gray whales are a species that could potentially occur in the proposed project area but are not expected to have reasonable potential to be harassed by CALTRANS’ SFOBB actions because they are unlikely to occur in the project area, as discussed above. This species is included in Table 1 but is omitted from further analysis. For species status, we provide information regarding U.S. regulatory status under the MMPA and ESA in Table 2.

Table 1. Marine Mammal Species Potentially Present in Region of Activity.

Common Name	Scientific Name	ESA/MMPA Status	Occurrence	Seasonality	Range	Stock Abundance	Potential Biological Removal (PBR)
Harbor seal (CA stock)	<i>Phoca vitulina richardii</i>	NL/ND	Common	Year round	California	30,968	1,641
California sea lion (US stock)	<i>Zalophus californianus</i>	NL/ND	Common	Year round	California	296,750	9,200
Northern fur seal (CA stock)	<i>Callorhinus ursinus</i>	NL/ND	Rare	Year round	California	12,844	451
Northern elephant seal (CA breeding stock)	<i>Mirounga angustirostris</i>	NL/ND	Occasional	Spring & fall	California	179,000	4,882
Gray whale (Eastern north Pacific stock)	<i>Eschrichtius robustus</i>	NL*/ND	Rare	Spring & fall	Mexico to the U.S. Arctic Ocean	20,990	624
Harbor porpoise (SF-Russian River stock)	<i>Phocoena phocoena</i>	NL/ND	Rare	Year round	California	9,886	66
Coastal bottlenose dolphin (CA coastal stock)	<i>Tursiops truncatus</i>	NL/ND	Rare	Year round	California	323	2.4

NL = Not Listed; * The E. North Pacific population is not listed under the ESA.; ND = Not Depleted under the MMPA

Potential Effects of the Specified Activity on Marine Mammals and their Habitat

The proposed CALTRANS SFOBB work using controlled charges (*i.e.*, implosion events) could adversely affect marine mammal species and stocks by exposing them to elevated noise levels in the vicinity of the activity area. Based on the nature of the other activities associated with the dismantling of Piers E6 through E18 of the original SFOBB East Span (mechanical dismantling) and measured sound levels from those activities during past monitoring associated with previous IHAs, NMFS does not expect activities other than implosion events to contribute to underwater noise levels such that take of marine mammals would potentially occur. The project would not result in permanent impacts to habitats used directly by marine mammals, nor impact food sources in any significant adverse way. The *Federal Register* notice for the proposed IHA (82 FR 26063, June 6, 2017) included a discussion of the effects of disturbance on marine mammals and their habitat. That information has not changed and is not repeated here. Please refer to the *Federal Register* notice for that information.

Estimated Take

This section provides a summary of the number of incidental takes authorized through the IHA, which informed both NMFS' consideration of whether the number of takes is "small" and the negligible impact determination.

Detailed information on how estimated take was calculated was provided in the Estimated Take section of the proposed IHA *Federal Register* notice (82 FR 26063, June 6, 2017; 26070-26074). Please refer to that *Federal Register* notice for that detailed information. Harassment is the only type of take expected to result from these activities. Authorized takes would be by Level B harassment only, in the form of disruption of

behavioral patterns and/or TTS for individual marine mammals resulting from exposure to noise from the controlled implosions of 13 piers of the original East Span of the SFOBB. Based on the nature of activity and past results from controlled implosions of Piers E3, E4, and E5, Level A harassment is neither anticipated nor authorized.

A summary of the authorized number of takes by implosion of Piers E6 through E18 is provided in Table 2.

Table 2. Summary of authorized takes of marine mammals for the Pier E4 and E5 Implosions.

Species	Level B Behavioral	Level B TTS	Stock Abundance	Percent take of population
Pacific harbor seal	66	48	30,968	0.37
California sea lion	18	12	296,750	0.01
Northern elephant seal	6	3	179,000	0.01
Northern fur seal	6	3	12,844	0.21
Harbor porpoise	18	9	9,886	0.09
Bottlenose dolphin	6	3	323	2.8
TOTAL	120	78		

Mitigation

In order to issue an incidental take authorization 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 adverse 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 latter is 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 such 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 weigh 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, which considers the nature of the potential adverse impact being mitigated (likelihood, scope, range), as well as the likelihood that the measure will be effective if implemented; and 2) the practicability of the measures for applicant implementation, which may consider such things as cost and impact on operations.

Mitigation Measures for Confined Implosion

For CALTRANS's proposed controlled implosions of Piers E6 through E18, CALTRANS will utilize the mitigation measures discussed below to minimize the potential impacts to marine mammals in the project vicinity, which were developed and successfully employed for previous controlled implosions of other piers of the original East Span of the SFOBB. The primary purposes of these mitigation measures are to minimize impacts by reducing sound levels from the activities and to monitor for marine mammals within designated exclusion zones and zones of influence (ZOI). Specific mitigation measures are:

Time Restriction

Implosion of Piers E6 through E18 will only be conducted during daylight hours, with enough time for pre and post implosion monitoring during daylight hours. Implosion

events will also only be conducted during periods with good visibility when the largest exclusion zone can be visually monitored. In addition, to minimize impacts on biological resources, implosion events will be conducted at slack tides between September and November.

Installation of Blast Attenuation System (BAS)

Prior to the demolition of Piers E6 through E18, CALTRANS will install a Blast Attenuation System (BAS) as described above to reduce the noise and shockwave from the implosion.

Establishment of Level A Exclusion Zone

CALTRANS will establish marine mammal exclusion zones (MMEZ) for both the mortality and Level A harassment zone (including permanent threshold shift (PTS), GI track injury, and slight lung injury) using the criteria threshold that extends out the furthest distance (refer to Table 3). As an additional conservative measure to ensure that no marine mammals are taken by Level A harassment, the field-implemented MMEZ will be 20 percent larger than the calculated distances to threshold criteria.

Table 3. Threshold Distances (feet (meters)) Calculated for Each Implosion Scenario.

Group	Species	Level B harassment		Level A harassment	Serious Injury		Mortality (ft (m))
		Behavioral (ft (m))	TTS (pk/SEL _{cum}) (ft (m))	PTS (pk/SEL _{cum}) (ft (m))	GI Tract (ft (m))	Slight Lung (ft (m))	
Implosion of Pier E6							
Mid-freq cetacean	Bottlenose dolphin	1,330 ft/ (405m)	180ft/ 881ft (55m/ 57m)	98ft/ 256ft (30m/ 78m)	48ft (15m)	48ft (15 m)	<40ft (<12m)
High-freq cetacean	Harbor porpoise	12,567ft (3,830m)	3,127ft/ 8,358ft (953m/ 2,548m)	1,697ft/ 2,459ft (517m/ 750m)	48ft (15m)	48ft (15 m)	<40ft (<12m)
Phocidae	Harbor seal & northern elephant seal	2,220ft (677m)	613ft/ 1,484ft (187m/ 452m)	332ft/ 443ft (101m/ 135m)	48ft (15m)	48ft (15 m)	<40ft (<12m)
Otariidae	California sea lion & northern fur seal	554ft (169m)	147ft/ 367ft (45m/ 112m)	80ft/ 106ft (24m/ 48m)	48ft (15m)	48ft (15 m)	<40ft (<12m)
Implosion of Two 504-ft Span Piers							
Mid-freq cetacean	Bottlenose dolphin	1,055ft (322m)	166ft/ 685ft (51m/ 208m)	90ft/ 190ft (27m/ 58m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)

High-freq cetacean	Harbor porpoise	10,300ft (3,139m)	2,882ft/ 6,800ft (878m/ 2,073m)	1,564ft/ 1,966ft (477m/ 599m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Phocidae	Harbor seal & northern elephant seal	1,790ft (546m)	565ft/ 1,186ft (172m/ 361m)	306ft/ 333ft (93m/ 101m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Otariidae	California sea lion & northern fur seal	421ft (128m)	136ft/ 274ft (41m/ 84m)	74ft/ 78ft (23m/ 24m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Implosion of Two 288-ft Span Piers							
Mid-freq cetacean	Bottlenose dolphin	798ft (243m)	166ft/ 517ft (51m/ 158m)	90ft/ 126ft (27m/ 38m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
High-freq cetacean	Harbor porpoise	7,700ft (2,347m)	2,882ft/ 5,140ft (878m/ 1,567m)	1,564ft/1,493ft (477m/455m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Phocidae	Harbor seal & northern elephant seal	1,359ft (414m)	565ft/ 900ft (172m/ 274m)	306ft/232ft (93m/71m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Otariidae	California sea lion & northern fur seal	304ft (93m)	136ft/ 185ft (41m/ 56m)	74ft/52ft (23m/16m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Implosion of Three 288-ft Span Piers							
Mid-freq cetacean	Bottlenose dolphin	1,000ft (305m)	166ft/ 629ft (51m/ 192m)	90ft/ 132ft (27m/ 40m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
High-freq cetacean	Harbor porpoise	9,403ft (2,866m)	2,882ft/ 5,900ft (878m/ 1,798m)	1,564ft/ 1,722ft (477m/ 525m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Phocidae	Harbor seal & northern elephant seal	1,580ft (482m)	565ft/ 1,045ft (172m/ 319m)	306ft/258ft (93m/79m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Otariidae	California sea lion & northern fur seal	339ft (103m)	136ft/ 201ft (41m/ 61m)	74ft/52ft (23m/16m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Implosion of Four 288-ft Span Piers							
Mid-freq cetacean	Bottlenose dolphin	1,000ft (305m)	166ft/ 629ft (51m/ 192m)	90ft/ 132ft (27m/ 40m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
High-freq cetacean	Harbor porpoise	9,935ft (3,028m)	2,882ft/ 6,590ft (878m/ 2,009m)	1,564ft/ 1,917ft (477m/ 584m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Phocidae	Harbor seal & northern elephant seal	1,730ft (527m)	565ft/ 1,135ft (172m/ 346m)	306ft/264ft (93m/80m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)
Otariidae	California sea lion & northern fur seal	349ft (106m)	136ft/ 204ft (41m/ 62m)	74ft/52ft (23m/16m)	48ft (15m)	<40ft (<12m)	<40ft (<12m)

The isopleths for PTS for phocids (harbor seal and elephant seal) cover the entire area for both Level A harassment and mortality for all pinnipeds (including California sea lions and northern fur seals), as well as bottlenose dolphins. Therefore, the pinniped and dolphin exclusion zone will be established at the radial distance to the phocid PTS Level A harassment threshold plus an additional 20 percent conservative factor. The harbor porpoise exclusion zone will be established at the radial distance to the high-frequency cetacean PTS Level A harassment threshold plus an additional 20 percent conservative

factor (see Table 23 and Figures 12-14 and 17-21 of the IHA application). These MMEZs will be monitored by marine mammal observers (MMOs), and if any marine mammals are observed within the MMEZs, the implosion will be delayed until the animal leaves the area or at least 15 minutes have passed since the last observation of pinnipeds and small cetaceans and at least 30 minutes have passed since the last observation of bottlenose dolphins.

Establishment of Level B Behavioral Harassment and Temporary Hearing Threshold Shift (TTS) Monitoring Zones

Marine mammal monitoring zones will be established for both behavioral response and temporary threshold shift (TTS) (Level B harassment). Hydroacoustic monitoring results from the implosions of Piers E3, E4, and E5 were used to calculate distances to these thresholds for the implosions of Piers E6 through E18 (see Chapter 6 and Tables 9 to 18 of the IHA application). As a conservative measure, the field-implemented behavioral response and TTS monitoring zones will be 20 percent larger than the calculated distances to threshold criteria shown in Tables 9 to 18 of the IHA application.

The isopleths for Level B harassment to phocids (harbor seals and elephant seals) for all pier implosion scenarios cover the entire area for Level B harassment to all pinnipeds including otariids (California sea lions and fur seals) as well as bottlenose dolphins. Therefore, the pinniped and dolphin Level B harassment monitoring zones for each pier implosion scenario will be established at the radial distance to the phocid Level B harassment threshold plus an additional 20 percent conservative factor (see Tables 24 and 25 and Figures 12-16 of the IHA application).

Communication

All MMOs will be equipped with mobile phones and a VHF radio as a backup. One person will be designated as the Lead MMO and will be in constant contact with the Resident Engineer on site and the blasting crew. The Lead MMO will coordinate marine mammal sightings with the other MMOs. MMOs will contact the other MMOs when a sighting is made within the exclusion zone or near the exclusion zone so that the MMOs within overlapping areas of responsibility can continue to track the animal and the Lead MMO is aware of the animal. If an animal has entered the exclusion zone or is near it within 30 minutes of blasting, the Lead MMO will notify the Resident Engineer and blasting crew. The Lead MMO will keep them informed of the disposition of the animal.

Mitigation Conclusions

NMFS has carefully evaluated the applicant's proposed mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting 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:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals;
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and
- The practicability of the measure for applicant implementation.

Any mitigation measure(s) prescribed by NMFS 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 numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only);

(3) A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels of activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only);

(4) A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels of activities expected to result in the take of marine mammals (this goal may contribute to a, above, or to reducing the severity of harassment takes only);

(5) Avoidance or minimization of adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time; and/or

(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 applicant's proposed measures, as well as other measures considered by NMFS, NMFS has determined that the mitigation measures provide the means of effecting the least practicable impact on marine mammals 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 Incidental Take Authorizations (ITA) must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area. Effective reporting is critical to both compliance as well as ensuring that the most value is obtained from the required monitoring. CALTRANS has proposed marine mammal monitoring measures as part of the IHA application found at www.nmfs.noaa.gov/pr/permits/incidental.htm.

Monitoring measures NMFS prescribes shall improve our 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, absence, 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 animals; 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/or
- Mitigation and monitoring effectiveness.

Monitoring Measures

As most elements of marine mammal monitoring plans for pile driving activities are similar to what would be required for underwater implosions, monitoring for impacts to marine mammals from the implosion activities for Piers E3, E4, and E5 were based on the SFOBB pile driving monitoring protocol. Monitoring for the implosion events for Piers E6 through E18 will also be based on the SFOBB pile driving monitoring protocol

and past implosion activities for Piers E3, E4, and E5. These monitoring plans include monitoring an exclusion zone and ZOIs for TTS and behavioral harassment described above as well as the following:

(1) Marine Mammal Observers

A minimum of 10 MMOs will be required during the controlled implosions of Piers E6 through E18 so that the MMEZ, Level B Harassment TTS and Behavioral ZOIs, and surrounding area can be monitored. Up to 15 MMOs will be required for implosion events involving multiple piers in order to monitor the full extent of these areas. One MMO will be designated as the Lead MMO and would receive updates from other MMOs on the presence or absence of marine mammals within the MMEZ and will notify the Environmental Compliance Manager of a cleared exclusion zone to the implosion(s).

(2) Monitoring Protocol

Implosions of Piers E6 through E18 will be conducted only during daylight hours and with enough time for pre and post-implosion monitoring during daylight hours, and with good visibility (*i.e.*, clear skies and no high winds). This work will be completed so that MMOs will be able to detect marine mammals within the exclusion zones and beyond. The Lead MMO will be in contact with other MMOs and if any marine mammals enter an exclusion zone within 30 minutes of blasting, the Lead MMO will notify the Environmental Compliance Manager that the implosion may need to be delayed. The Lead MMO will keep the Environmental Compliance Manager informed about the disposition of the animal. If the animal remains in the MMEZ, blasting will be delayed until it has left the exclusion zone. If the animal dives and is not seen again, blasting will be delayed at least 15 minutes for pinnipeds and small cetacean (harbor

porpoise), and 30 minutes for bottlenose dolphin. After the implosion has occurred, the MMOs will continue to monitor the area for at least 60 minutes.

(3) Data Collection

Each MMO will record the observation position, start and end times of observations, and weather conditions (*i.e.*, sunny/cloudy, wind speed, fog, visibility). For each marine mammal sighting, the following will be recorded, if possible:

- Species;
- Number of animals (with or without pup/calf);
- Age class (pup/calf, juvenile, adult);
- Identifying marks or color (*e.g.*, scars, red pelage, damaged dorsal fin);
- Position relative to piers being imploded (distance and direction);
- Movement (direction and relative speed); and
- Behavior (*e.g.*, logging (resting at the surface), swimming, spy-hopping (raising above the water surface to view the area), foraging).

(4) Post-implosion Survey

Although any injury or mortality from the implosions of Piers E6 through E18 is very unlikely, boat or shore surveys will be conducted daily for 3 days following the event, to determine whether any injured or stranded marine mammals are in the area. If an injured or dead animal is discovered during these surveys or by other means, the NMFS-designated stranding team will be contacted to pick up the animal. Veterinarians will treat the animal or will conduct a necropsy to attempt to determine whether it stranded because of the pier implosions.

Reporting Measures

CALTRANS is required to submit a draft monitoring report within 90 days after completion of the construction work or the expiration of the IHA, whichever comes first. This draft report will detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed. NMFS will have an opportunity to provide comments on the draft report within 30 days, and if NMFS has comments, CALTRANS will address the comments and submit a final report to NMFS within 30 days. If no comments are provided by NMFS after 30 days receiving the report, the draft report will be considered final.

Marine Mammal Stranding Plan

Stranding plans for the pier implosions of Piers E3, E4, and E5 were prepared in cooperation with the local NMFS-designated marine mammal stranding, rescue, and rehabilitation center. An updated version of this plan will be implemented during implosions of Piers E6 through E18. Although avoidance and minimization measures likely will prevent any injuries, preparations will be made in the unlikely event that marine mammals are injured. Elements of the plan will include the following:

1. The stranding crew will prepare treatment areas at an NMFS-designated facility for cetaceans or pinnipeds that may be injured from the implosions. Preparation will include equipment to treat lung injuries, auditory testing equipment, dry and wet caged areas to hold animals, and operating rooms if surgical procedures are necessary;
2. A stranding crew and a veterinarian will be on call near the piers at the time of the implosions to quickly recover any injured marine mammals, provide emergency veterinary care, stabilize the animal's condition, and

transport individuals to an NMFS-designated facility. If an injured or dead animal is found, NMFS (both the regional office and headquarters) will be notified immediately, even if the animal appears to be sick or injured from causes other than the implosions;

3. Post-implosion surveys will be conducted immediately after the event and over the following 3 days to determine whether any injured or dead marine mammals are in the area; and
4. Any veterinarian procedures, euthanasia, rehabilitation decisions, and time of release or disposition of the animal will be at the discretion of the NMFS-designated facility staff and the veterinarians treating the animals. Any necropsies to determine whether the injuries or death of an animal was the result of an implosion or other anthropogenic or natural causes will be conducted at an NMFS-designated facility by the stranding crew and veterinarians. The results will be communicated to both the CALTRANS and to NMFS as soon as possible, followed by a written report within a month.

Negligible Impact Analysis and Determinations

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 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, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, *etc.*), the context of any responses (*e.g.*, critical reproductive time or location, migration, *etc.*), 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’ 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 the species and stocks listed in Table 2, given that the anticipated effects of CALTRANS’ SFOBB construction activities involving controlled implosions for Piers E6 through E18 on marine mammals are expected to be relatively similar in nature.

No injuries or mortalities are anticipated to occur as a result of CALTRANS’ SFOBB activity associated with the controlled implosions to demolish Piers E6 through E18, and none are authorized. The relatively low marine mammal density and small Level A exclusion zones make injury takes of marine mammals unlikely, based on take calculation described above. In addition, the Level A exclusion zones will be thoroughly monitored before the proposed implosion, and detonation activity will be postponed if a marine mammal is sighted within the exclusion zone.

The takes that are anticipated and authorized are expected to be limited to short-term Level B harassment (behavioral responses and TTS). Due to implementation of mitigation measures and proven success in implementation of these measures as evidenced during previous SFOBB activities, more significant acute stress responses, serious injury or mortality, and more significant behavioral responses are not anticipated as a result of the proposed activities. Marine mammals (Pacific harbor seal, northern elephant seal, California sea lion, northern fur seal, harbor porpoise, and bottlenose dolphin) present in the vicinity of the action area and taken by Level B harassment would most likely show overt brief disturbance (startle reaction) and avoidance of the area from elevated noise level during the implosion noise. A few marine mammals could experience TTS if they occur within the Level B TTS ZOI. However, TTS is a temporary loss of hearing sensitivity when exposed to loud sound, and the hearing threshold is expected to recover completely within minutes to hours. Therefore, it is not considered an injury. In addition, even if an animal receives a TTS, the TTS would be a one-time event from a brief impulse noise (about 5 seconds), making it unlikely that the TTS would lead to PTS. Finally, there is no critical habitat or other biologically important areas in the vicinity of CALTRANS' proposed controlled implosion areas (Calambokidis *et al.*, 2015).

The project also is not expected to have significant adverse effects on affected marine mammals' habitat, as analyzed in detail in the "Potential Effects of the Specified Activity on Marine Mammals and their Habitat" section of the proposed IHA *Federal Register* notice (82 FR 26063, June 6, 2017; 26067-26070). There is no biologically important area in the vicinity of the SFOBB project area. The project activities would not

permanently modify existing marine mammal habitat. The activities may kill some fish and cause other fish to leave the area temporarily, thus impacting marine mammals' foraging opportunities in a limited portion of the foraging range; but, because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

Based on the best available information, 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 CALTRANS's SFOBB demolition via controlled implosions of Piers E6 through E18 will have a negligible impact on the affected marine mammal species or stocks.

Small Numbers

Table 2 presents the numbers of marine mammals that could be taken by Level B harassment incidental to CALTRAN's activities. Our analysis shows that less than 2.8 percent of the affected stocks could be taken by behavioral harassment and TTS (see Table 2 in this document). Therefore, the numbers of marine mammals estimated to be taken are small relative to total populations of the affected species or stocks. In addition, the mitigation and monitoring measures (described previously in this document) prescribed in the IHA are expected to reduce even further any potential disturbance to marine mammals.

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, NMFS finds 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 subsistence uses of marine mammals in the proposed project area; and, thus, no subsistence uses impacted by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act

NMFS has determined that issuance of the IHA will have no effect on listed marine mammals, as none are known to occur in the action area.

Authorization

NMFS has issued an IHA to CALTRANS for conducting SFOBB activities involving demolition via controlled implosion of Piers E6 through E18, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated.

Dated: July 24, 2017.

Donna S. Wieting,

Director,

Office of Protected Resources,

National Marine Fisheries Service.

[FR Doc. 2017-15890 Filed: 7/28/2017 8:45 am; Publication Date: 7/31/2017]