Dated: October 15, 2018.

James Maeder,

Associate Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, performing the duties of Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2018–22841 Filed 10–18–18; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Proposed Monterey Peninsula Water Supply Project; Notice of Availability of Errata Document for the Final Environmental Impact Report/ Environmental Impact Statement

AGENCY: Office of National Marine Sanctuaries (ONMS), National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

ACTION: Notice of availability of Errata for the final environmental impact report/environmental impact statement.

SUMMARY: Notice is hereby given that the National Oceanic and Atmospheric Administration (NOAA) has published an errata document for the Final Environmental Impact Report/ Environmental Impact Statement (FEIR/ EIS) for a permit application to NOAA's Monterey Bay National Marine Sanctuary (MBNMS) submitted by California American Water Company (CalAm) to construct and operate Monterey Peninsula Water Supply Project, a reverse osmosis (RO) desalination facility project (Project) in Monterey County, California. A notice of availability (NOA) of the final EIR/ EIS was published in the **Federal Register** on March 30, 2018 (83 FR 13737).

DATES: This notice is applicable October 19, 2018.

ADDRESSES: Copies of the FEIR/EIS and the Errata document can be downloaded or viewed on the internet at *https://montereybay.noaa.gov/resourcepro/resmanissues/desal-projects.html.*

FOR FURTHER INFORMATION CONTACT: Karen Grimmer at 99 Pacific Ave., Bldg. 455a, Monterey, CA 93940, or call 831–647–4253, or email: *montereybay@noaa.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

NOAA, as the Federal lead agency for purposes of the National Environmental Policy Act (NEPA), and the California Public Utilities Commission (CPUC), the state lead agency for purposes of the California Environmental Quality Act (CEQA), previously released a joint final environmental impact review/ environmental impact statement (EIR/ EIS) that analyzes the potential effects on the physical and human environment of the proposed Monterey Peninsula Water Supply Project.

II. Errata Document

The purpose of this notice is to inform the public that the errata document for the Final Environmental Impact Report/ Environmental Impact Statement (FEIR/ EIS) for the project is available for public inspection. It is available electronically on the website listed in the **ADDRESSES** section of this notice. It is also available by email by writing to the addresses identified in the **FOR FURTHER INFORMATION CONTACT** section of this notice.

Authority: 16 U.S.C. 1431 *et seq.;* 42 U.S.C. 4321 *et seq.*

Dated: September 13, 2018.

John Armor,

Director for the Office of National Marine Sanctuaries.

[FR Doc. 2018–22863 Filed 10–18–18; 8:45 am]

BILLING CODE 3510–NK–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XG454

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to US 101/ Chehalis River Bridge-Scour Repair in Washington State

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

ACTION: Notice; proposed incidental harassment authorization; request for comments on proposed authorization and possible renewal.

SUMMARY: NMFS has received a request from the Washington State Department of Transportation (WSDOT) for authorization to take marine mammals incidental to the US 101/Chehalis River Bridge-Scour Repair Project in Washington State. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an incidental harassment authorization (IHA) to incidentally take marine mammals during the specified activities. NMFS is also requesting comments on a possible one-year renewal that could be issued under certain circumstances and if all requirements are met, as described in *Request for Public Comments* at the end of this notice. NMFS will consider public comments prior to making any final decision on the issuance of the requested MMPA authorization and agency responses will be summarized in the final notice of our decision.

DATES: Comments and information must be received no later than November 19, 2018.

ADDRESSES: Comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service. Physical comments should be sent to 1315 East-West Highway, Silver Spring, MD 20910 and electronic comments should be sent to *ITP.pauline@noaa.gov.*

Instructions: NMFS is not responsible for comments sent by any other method, to any other address or individual, or received after the end of the comment period. Comments received electronically, including all attachments, must not exceed a 25-megabyte file size. Attachments to electronic comments will be accepted in Microsoft Word or Excel or Adobe PDF file formats only. All comments received are a part of the public record and will generally be posted online *at https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities* without change. All personal identifying information (*e.g.,* name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Rob Pauline, Office of Protected Resources, NMFS, (301) 427–8401. Electronic copies of the application and supporting documents may be obtained online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-construction-activities.* 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 such 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 such takings are set forth.

The National Defense Authorization Act (Pub. L. 108–136) removed the small numbers and specified geographical region limitations indicated above and amended the definition of harassment as it applies to a military readiness activity.

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 incidental harassment authorization) with respect to potential impacts on the human environment.

This action is consistent with categories of activities identified in Categorical Exclusion B4 (incidental harassment authorizations with no anticipated serious injury or mortality) of the Companion Manual for NOAA Administrative Order 216–6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has preliminarily determined that the issuance of the proposed IHA qualifies to be categorically excluded from further NEPA review.

We will review all comments submitted in response to this notice prior to concluding our NEPA process or making a final decision on the IHA request.

Summary of Request

On July 26, 2018, NMFS received a request from WSDOT for an IHA to take marine mammals incidental to US 101/Chehalis River Bridge-Scour Repair in the State of Washington. The application was deemed adequate and complete on September 21, 2018. WSDOT's request is for take of small numbers of harbor seal (*Phoca vitulina*); California sea lion (*Zalophus californianus*); Steller sea lion (*Eumetopias jubatus*); gray whale (*Eschrichtius robustus*); and harbor porpoise (*Phocoena phocoena*) by Level B harassment only. Neither WSDOT nor NMFS expects serious injury or mortality to result from this activity and, therefore, an IHA is appropriate. NMFS previously issued an IHA to WSDOT to incidentally take five species of marine mammal by Level B harassment. The IHA was issued on October 10, 2017 (82 FR 50628; November 1, 2017) and is valid from July 1, 2018 through June 30, 2019. However, WSDOT has made minor changes to the project plan and delayed the work by one year. Therefore, WSDOT has requested that NOAA Fisheries re-issue the IHA with the dates changed to accommodate the analyzed work with minor modifications to the number of piles driven and removed as well as the number of animals authorized for take. No work was conducted under the original IHA.

Description of the Proposed Activity

Overview

The proposed IHA would authorize work for the US 101/Chehalis River Bridge-Scour Repair Project in Washington State between July 15, 2019 and February 15, 2020. Vibratory pile driving will be required to remove and install timber piles, steel sheets and steel H-piles. Sound in the water from vibratory driving may result in behavioral harassment. NMFS previously issued an IHA to WSDOT to incidentally take five species of marine mammal by Level B harassment on October 18, 2017 (82 FR 50628; November 1, 2017). That IHA is valid from July 1, 2018 through June 30, 2019. However, WSDOT has made minor changes to the project plan and delayed the work by one year. Therefore, WSDOT has requested that NMFS re-issue the IHA with the dates changed to accommodate the analyzed work with minor modifications to the number of piles driven and removed as well as the number of animals authorized for take. No work was conducted or is planned to occur under the original IHA.The purpose of the US 101/Chehalis River Bridge-Scour Repair Project is to make the bridge foundation stable and protect the foundation from further scour. Bridge scour is the removal of sediment such as sand and gravel from around bridge abutments or piles. Scour, caused by swiftly moving water, can scoop out scour holes, compromising the integrity of a structure. WSDOT plans to remove debris from the scour area, fill the scour void under Pier 14 with cement (to protect the pilings from marine borers), fill the scour hole, and protect the pier with scour resistant material.

Note that WSDOT has made revisions to the number and types of piles that would be installed and removed under the proposed 2019 IHA. The first change is the removal of 44 timber piles (some of which may be treated with creosote) from the immediate vicinity of the scour repair project. Additionally, 18 sheet piles will be temporarily installed adjacent to Pier 14, instead of the 44 sheet piles originally proposed.

Dates and Duration

Due to NMFS and the U.S. Fish and Wildlife Service (USFWS) in-water work timing restrictions to protect Endangered Species Act (ESA)-listed salmonids, planned WSDOT in-water construction is limited each year to July 15 through February 15. For this project, in-water construction is planned to take place between July 15, 2019 and September 30, 2019. The proposed IHA would be effective from July 15, 2019 to February 15, 2020. The estimated maximum time period for pile installation and removal is 37 hours over 6 days (Table 1).

Specific Geographic Region

The US 101/Chehalis River Bridge is located in the City of Aberdeen, Grays Harbor County, Washington (Figure 1–1 in the IHA application). Grays Harbor is an estuarine bay located 45 miles (72 km) north of the mouth of the Columbia River, on the Southwest Pacific coast of Washington state. The bridge is located in Township 17 North, Range 9 West, Section 9, where the Chehalis River enters Grays Harbor. Land use in the Aberdeen area is a mix of residential, commercial, industrial, and open space and/or undeveloped lands (Figure 1–2 in the IHA application).

Detailed Description of Specific Activity

Vibratory hammers are commonly used in steel pile driving and removal when appropriate sediments are found at a specific project site. A pile is

typically placed into position using a choker and crane, and then vibrated between 1,200 and 2,400 vibrations per minute. The vibrations liquefy the sediment surrounding the pile allowing it to penetrate to the required seating depth, or to be removed.

Forty-four 14-inch diameter timber piles/stubs located immediately north of Pier 14 will be removed using a vibratory hammer. If necessary, some deteriorated piles may require cutting below the ground level to minimize turbidity. If use of a clamshell bucket is required due to pile breakage, turbidity curtains will be employed.

A steel template will be located adjacent to or attached to Pier 14. The template will likely be constructed using six steel H piles which will be installed using a vibratory hammer. Using the template as a guide, 18 sheet piles will be driven with a vibratory hammer into the substrate to form a temporary interlocked sheet pile wall shoring system around the scour repair area (Table 1). After the sheet piles have been installed, the template will be removed.

TABLE 1—PILE REMOVAL MITIGATION AND SCOUR REPAIR PILE SUMMARY

Method	Pile type	Number of piles	Minutes per pile	Total minutes	Duration (hours)	Piles per day	Duration (11-hour work days)
Vibratory Removal	14-inch diameter timber	44	30	1,320	22	22	2
Vibratory Driving	Sheet	18	30	540	9	10	2
Vibratory Driving	H pile	6	30	180	3	6	1
Vibratory Removal	H pile	6	30	180	3	6	1
Total				2,220	37		6.0

Once the shoring system is in place, cementitious material will be tremie pumped underwater inside the shoring system to fill the voids between the riverbed and the pier seal. A tremie is a large metal hopper and pipe used to distribute freshly mixed concrete over an underwater site. The foot of the pipe is kept below the concrete level, while the upper level of the concrete in the pipe is kept above the water level to prevent the water diluting the concrete. The concrete falls by gravity and is continuously placed until the shaft is full. This material will protect the untreated wood pier piling from marine borers. Following installation of the cementitious sealing material, the shoring system will be considered a permanent feature of the scour repair. The sheet piles will be cut off and removed to the level of final concrete placement. The final steps will be the placement of scour resistant material, such as rip rap, on and around the pier and in the scour hole to protect the pier from future erosion. The cutting of sheet piles and placement of rip rap is not anticipated to result in take.

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

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 (*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 2 lists all species with expected potential for occurrence in the project location and summarizes information related to the population or stock, including regulatory status under the MMPA and ESA and potential biological removal (PBR), where known. For taxonomy, we follow Committee on Taxonomy (2017). 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. 2017 SARs (*https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments*) and draft U.S. 2018 SARS (*https://www.fisheries.noaa.gov/national/marine-mammal-protection/draft-marine-mammal-stock-assessment-reports*). All values presented in Table 2 are the most recent available at the time of publication.

TABLE 2—MARINE MAMMALS WITH POTENTIAL PRESENCE WITHIN THE PROPOSED PROJECT AREA

Common name	Scientific name	Stock	ESA/MMPA status; Strategic (Y/N) [1]	Stock abundance (CV, N_{min}, most recent abundance survey) [2]	PBR	Annual M/SI [3]
Order Cetartiodactyla—Cetacea—Superfamily Mysticeti (baleen whales) Family Eschrichtiidae						
Gray whale	*Eschrichtius robustus*	Eastern North Pacific	N	20,990 (0.05, 20,125, 2011)	624	132
Family Phocoenidae (porpoises)						
Harbor porpoise	*Phocoena phocoena*	Northern Oregon/ Washington Coast.	N	21,487 (0.44, 15,123, 2011)	151	≥3.0
Order Carnivora—Superfamily Pinnipedia Family Otariidae (eared seals and sea lions)						
California sea lion	*Zalophus californianus*	U.S.	N	296,750 (n/a, 153,337, 2011)	9,200	389
Steller sea lion	*Eumetopias jubatus*	Eastern U.S.	N	41,638 (n/a, 41,638, 2015) [4]	2,498	108
Family Phocidae (earless seals)						
Harbor seal	*Phoca vitulina*	Oregon/Washington Coast.	N	Unk [5]	Undet	10.6

[1] Endangered Species Act (ESA) status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (−) indicates that the species is not listed under the ESA or designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is automatically designated under the MMPA as depleted and as a strategic stock.

[2] NMFS marine mammal stock assessment reports online at: *https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments.* CV is coefficient of variation; N_{min} is the minimum estimate of stock abundance. In some cases a CV is not applicable. For certain stocks of pinnipeds, abundance estimates are based upon observations of animals (often pups) ashore multiplied by some correction factor derived from knowledge of the species' (or similar species') life history to arrive at a best abundance estimate; therefore, there is no associated CV.

[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 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.

[4] Best estimate of pup and non-pup counts, which have not been corrected to account for animals at sea during abundance surveys.

[5] Harbor seal estimate is based on data that are 8 years old, but this is the best available information for use here.

All species that could potentially occur in the proposed survey areas are included in Table 2.

Harbor Seals

Harbor seals haul out on rocks, reefs and beaches, and feed in marine, estuarine and occasionally fresh waters. Harbor seals display strong fidelity for haul out sites (Pitcher and Calkins 1979; Pitcher and McAllister 1981). Harbor seals in Grays Harbor are part of the Oregon/Washington Coast Stock. In Grays Harbor, pups are born from mid-April through July (WDFW 2012). Of the pinniped species that commonly occur within the region of activity, harbor seals are the most common and the only pinniped that breeds and remains in the inland marine waters of Washington year-round (Calambokidis and Baird 1994). Harbor seals are non-migratory; their local movements are associated with such factors as tides, weather, season, food availability and reproduction (Scheffer and Slipp 1944; Fisher 1952; Bigg 1969, 1981). They are not known to make extensive pelagic migrations, although some long-distance movements of tagged animals in Alaska (108 miles) and along the U.S. west coast (up to 342 miles) have been recorded (Pitcher and McAllister 1981).

In order to estimate abundance, aerial surveys of harbor seals in Oregon and Washington were conducted by the National Marine Mammal Laboratory (NMML) and the Oregon and Washington Departments of Fish and Wildlife (ODFW and WDFW) during the 1999 pupping season. Total numbers of hauled-out seals (including pups) were counted during these surveys. In 1999, the mean count of harbor seals occurring along the Washington coast was 10,430 (CV = 0.14) animals. In 1999, the mean count of harbor seals occurring along the Oregon coast and in the Columbia River was 5,735 (CV = 0.14) animals. Combining these counts results in 16,165 (CV = 0.10) harbor seals in the Oregon/Washington Coast stock. However, because the most recent abundance estimate is >8 years old, there is no current estimate of abundance available for this stock and the current population trend is unknown.

The nearest documented harbor seal haul out site to the US 101/Chehalis River Bridge is a low-tide haul out located seven miles to the west. According to Jeffries, *et al.* (2000), all haul outs in Grays Harbor are associated with tidal flats; at high tide it is assumed that these animals are foraging elsewhere in the estuary.

California Sea Lion

California sea lions are found along the west coast from the southern tip of Baja California to southeast Alaska. They breed mainly on offshore islands from Southern California's Channel

Islands south to Mexico. Non-breeding males often roam north in spring foraging for food (Everitt *et al.* 1980). Since the mid-1980s, increasing numbers of California sea lions have been documented feeding on fish along the Washington coast and,more recently, in the Columbia River as far upstream as Bonneville Dam, 145 mi (233 km) from the river mouth. All age classes of males are seasonally present in Washington waters (Jeffries, *et al.* 2000). California sea lions do not avoid areas with heavy or frequent human activity, but rather may approach certain areas to investigate. This species typically does not flush from a buoy or haul out if approached. The nearest documented California sea lion haul out sites to the U.S. 101 Chehalis River Bridge project site are at Split Rock, 35 miles north of the entrance to Grays Harbor; and at the mouth of the Columbia River, 46 miles south of the entrance to Grays Harbor (Jeffries, *et al.* 2000). A few California sea lions may haul out on docks and buoys in the vicinity of the Westport marina,located 15 miles west of the project site.

Steller Sea Lion

The Steller sea lion is a pinniped and the largest of the eared seals. Steller sea lion populations that primarily occur east of 144° W (Cape Suckling, Alaska) comprise the Eastern Distinct Population Segment (DPS), which was de-listed and removed from the Endangered Species List on November 4, 2013 (78 FR 66140). This stock is found in the vicinity of Grays Harbor. Steller sea lions congregate at rookeries in California, Oregon, Washington, and British Columbia for pupping and breeding from late May to early June (Gisiner 1985; NMFS 2016a). Rookeries are usually located on beaches of relatively remote islands, often in areas exposed to wind and waves, where access by humans and other mammalian predators is difficult (WDFW 1993).

The nearest documented Steller sea lion haul out sites to the U.S. 101 Chehalis River Bridge project site are at Split Rock, 35 miles north of the entrance to Grays Harbor; and at the mouth of the Columbia River, 46 miles south of the entrance to Grays Harbor (Jeffries, *et al.* 2000). A few Steller sea lions may haul out on buoys in the vicinity of the Westport marina, located 15 miles west of the project site.

Gray Whale

During summer and fall, most whales in the Eastern North Pacific population feed in the Chukchi, Beaufort and northwestern Bering Seas. An exception to this is the relatively small number of whales (approximately 200) that summer and feed along the Pacific coast between Kodiak Island, Alaska and northern California (Calambokidis *et al.* 2012), referred to as the ''Pacific Coast Feeding Group'' (NMFS 2015a).

Gray whales are known to use Grays Harbor. For example, during a 1996 survey 27 different whales were recorded in the Harbor. (Calambokidis and Guan 1997). However, between 1998 and 2010, gray whale numbers peaked in the spring followed by slightly lesser numbers in the fall in a study area that included Grays Harbor and coastal waters along the south Washington coast. Note, that much of the in-water pile driving work for the proposed action is likely to occur during summer months. (Calambokidis, *et al.* 2012)

Harbor Porpoise

The harbor porpoise inhabits temporal, subarctic, and arctic waters. Harbor porpoise are known to occur year-round along the Oregon/Washington coast. Aerial survey data from coastal Oregon and Washington, collected during all seasons, suggest that harbor porpoise distribution varies by depth. Although distinct seasonal changes in abundance along the west coast have been noted, and attributed to possible shifts in distribution to deeper offshore waters during late winter, seasonal movement patterns are not fully understood.

The Northern Oregon/Washington Coast Stock of harbor porpoise may be found near the project site. This stock occurs in waters from Lincoln City, Oregon to Cape Flattery Washington. Little information exists on harbor porpoise movements and stock structure in Grays Harbor, although it is suspected that in some areas harbor porpoises migrate (based on seasonal shifts in distribution).

Harbor porpoise primarily frequent coastal waters and occur most frequently in waters less than 328 ft (100 m) deep (Hobbs and Waite 2010). They may occasionally be found in deeper offshore waters. Hall (WSDOT 2018) found that the highest numbers were observed at water depths ranging from 61 to 100 m. Harbor porpoises are most often observed in small groups of one to eight animals (Baird 2003).

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Current data indicate that not all marine mammal species have equal hearing capabilities (*e.g.,* Richardson *et al.,* 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall *et al.* (2007) recommended that marine mammals be divided into functional hearing groups based on directly measured or estimated hearing ranges on the basis of available behavioral response data, audiograms derived using auditory evoked potential techniques, anatomical modeling, and other data. Note that no direct measurements of hearing ability have been successfully completed for mysticetes (*i.e.,* low-frequency cetaceans). Subsequently, NMFS (2018) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the approximately 65 dB threshold from the normalized composite audiograms, with the exception for lower limits for low-frequency cetaceans where the lower bound was deemed to be biologically implausible and the lower bound from Southall *et al.* (2007) retained. The functional groups and the associated frequencies are indicated below (note that these frequency ranges correspond to the range for the composite group, with the entire range not necessarily reflecting the capabilities of every species within that group):

- Low-frequency cetaceans (mysticetes): Generalized hearing is estimated to occur between approximately 7 Hz and 35 kHz;
- Mid-frequency cetaceans (larger toothed whales, beaked whales, and most delphinids): Generalized hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High-frequency cetaceans (porpoises, river dolphins, and members of the genera Kogia and Cephalorhynchus; including two members of the genus Lagenorhynchus, on the basis of recent echolocation data and genetic data): Generalized hearing is estimated to occur between approximately 275 Hz and 160 kHz.
- Pinnipeds in water; Phocidae (true seals): Generalized hearing is estimated to occur between approximately 50 Hz to 86 kHz;
- Pinnipeds in water; Otariidae (eared seals): Generalized hearing is estimated to occur between 60 Hz and 39 kHz.

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

(Hemilä *et al.,* 2006; Kastelein *et al.,* 2009; Reichmuth and Holt, 2013).

For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information. Five marine mammal species (2 cetacean and 3 pinniped (2 otariid and 1 phocid) species) have the reasonable potential to co-occur with the proposed survey activities. Please refer to Table 2. Of the cetacean species that may be present, one is classified as a low-frequency cetacean (*i.e.,* gray whale), and one is classified as a high-frequency cetacean (*i.e.,* harbor porpoise).

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

This section includes a summary and discussion of the ways that components of the specified activity may impact marine mammals and their habitat. The *Estimated Take by Incidental Harassment* section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The *Negligible Impact Analysis and Determination* section considers the content of this section, the *Estimated Take by Incidental Harassment* section, and the *Proposed Mitigation* section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and how those impacts on individuals are likely to impact marine mammal species or stocks.

The proposed River Bridge-Scour repair project will utilize in-water vibratory pile driving and pile removal that could adversely affect marine mammal species and stocks by exposing them to elevated noise levels in the vicinity of the activity area.

Exposure to high intensity sound for a sufficient duration may result in auditory effects such as a noise-induced threshold shift (TS)—an increase in the auditory threshold after exposure to noise (Finneran *et al.* 2005). Factors that influence the amount of threshold shift include the amplitude, duration, frequency content, temporal pattern, and energy distribution of noise exposure. The magnitude of hearing threshold shift normally decreases over time following cessation of the noise exposure. The amount of threshold shift just after exposure is the initial threshold shift. If the threshold shift eventually returns to zero (*i.e.,* the threshold returns to the pre-exposure value), it is a temporary threshold shift (Southall *et al.* 2007).

Threshold Shift (noise-induced loss of hearing)—When animals exhibit reduced hearing sensitivity (*i.e.,* sounds must be louder for an animal to detect them) following exposure to an intense sound or sound for long duration, it is referred to as TS. An animal can experience temporary threshold shift (TTS) or permanent threshold shift (PTS). TTS can last from minutes or hours to days (*i.e.,* there is complete recovery), can occur in specific frequency ranges (*i.e.,* an animal might only have a temporary loss of hearing sensitivity between the frequencies of 1 and 10 kHz), and can be of varying amounts (for example, an animal's hearing sensitivity might be reduced initially by only 6 dB or reduced by 30 dB). PTS is permanent, but some recovery is possible. PTS can also occur in a specific frequency range and amount as mentioned above for TTS.

For marine mammals, published data are limited to the captive bottlenose dolphin, beluga, harbor porpoise, and Yangtze finless porpoise (Finneran *et al.,* 2002, 2003, 2005, 2007, 2010a, 2010b; Finneran and Schlundt, 2010; Lucke *et al.,* 2009; Popov *et al.,* 2011a, 2011b; Kastelein *et al.,* 2012a; Schlundt *et al.,* 2000; Nachtigall *et al.,* 2003, 2004). For pinnipeds in water, data are limited to measurements of TTS in harbor seals, an elephant seal, and California sea lions (Kastak *et al.,* 1999, 2005; Kastelein *et al.,* 2012b).

Lucke *et al.* (2009) found a TS of a harbor porpoise after exposing it to airgun noise with a received SPL at 200.2 dB (peak-to-peak) re: 1 μPa, which corresponds to a sound exposure level (SEL) of 164.5 dB re: 1 μPa2 s after integrating exposure. Because the airgun noise is a broadband impulse, one cannot directly determine the equivalent of rms SPL from the reported peak-to-peak SPLs. However, applying a conservative conversion factor of 16 dB for broadband signals from seismic surveys (McCauley *et al.* 2000) to correct for the difference between peak-to-peak levels reported in Lucke *et al.* (2009) and rms SPLs, the rms SPL for TTS would be approximately 184 dB re: 1 μPa, and the received levels associated with PTS (Level A harassment) would be higher. However, NMFS recognizes that TTS of harbor porpoises is lower than other cetacean species empirically tested (Finneran and Schlundt 2010; Finneran *et al.* 2002; Kastelein and Jennings 2012).

Marine mammal hearing plays a critical role in communication with conspecifics, and interpretation of environmental cues for purposes such as predator avoidance and prey capture. Depending on the degree (elevation of threshold in dB), duration (*i.e.,* recovery time), and frequency range of TTS, and the context in which it is experienced, TTS can have effects on marine mammals ranging from discountable to serious (similar to those discussed in auditory masking, below). For example, a marine mammal may be able to readily compensate for a brief, relatively small amount of TTS in a non-critical frequency range that occurs during a time where ambient noise is lower and there are not as many competing sounds present. Alternatively, a larger amount and longer duration of TTS sustained during time when communication is critical for successful mother/calf interactions could have more serious impacts. Also, depending on the degree and frequency range, the effects of PTS on an animal could range in severity, although it is considered generally more serious because it is a permanent condition. Of note, reduced hearing sensitivity as a simple function of aging has been observed in marine mammals, as well as humans and other taxa (Southall *et al.* 2007), so one can infer that strategies exist for coping with this condition to some degree, though likely not without cost.

Masking—In addition, chronic exposure to excessive, though not high-intensity, noise could cause masking at particular frequencies for marine mammals that utilize sound for vital biological functions (Clark *et al.* 2009). Acoustic masking is when other noises such as from human sources interfere with animal detection of acoustic signals such as communication calls, echolocation sounds, and environmental sounds important to marine mammals. Therefore, under certain circumstances, marine mammals whose acoustical sensors or environment are being severely masked could also be impaired from maximizing their performance fitness in survival and reproduction.

Masking occurs at the frequency band that the animals utilize. Therefore, since noise generated from vibratory pile driving activity is mostly concentrated at low frequency ranges, it may have less effect on high frequency echolocation sounds by odontocetes (toothed whales). However, lower frequency man-made noises are more likely to affect detection of communication calls and other potentially important natural sounds such as surf and prey noise. It may also affect communication signals when they occur near the noise band and thus reduce the communication space of animals (*e.g.,* Clark *et al.* 2009) and cause increased stress levels (*e.g.,* Foote *et al.* 2004; Holt and Noren *et al.* 2009).

Unlike TS, masking, which can occur over large temporal and spatial scales, can potentially affect the species at

population, community, or even ecosystem levels, as well as individual levels. Masking affects both senders and receivers of the signals and could have long-term chronic effects on marine mammal species and populations. Recent science suggests that low frequency ambient sound levels have increased by as much as 20 dB (more than three times in terms of sound pressure level) in the world's ocean from pre-industrial periods, and most of these increases are from distant shipping (Hildebrand 2009).

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

Airborne noise will primarily be an issue for pinnipeds that are swimming or hauled out near the project site within the range of noise levels elevated above the acoustic criteria. We recognize that pinnipeds in the water could be exposed to airborne sound that may result in behavioral harassment when looking with their heads above water. Most likely, airborne sound would cause behavioral responses similar to those discussed above in relation to underwater sound. For instance, anthropogenic sound could cause hauled-out pinnipeds to exhibit changes in their normal behavior, such as reduction in vocalizations, or cause them to temporarily abandon the area and move further from the source. However, these animals would previously have been 'taken' because of exposure to underwater sound above the behavioral harassment thresholds, which are in all cases larger than those associated with airborne sound. Thus, the behavioral harassment of these animals is already accounted for in these estimates of potential take. Therefore, we do not believe that authorization of incidental take resulting from airborne sound for pinnipeds is warranted, and airborne sound is not discussed further here.

Behavioral disturbance—Finally, marine mammals' exposure to certain sounds could lead to behavioral disturbance (Richardson *et al.,* 1995), such as: changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities (such as socializing or feeding); visible startle response or aggressive behavior (such as tail/fluke slapping or jaw clapping); avoidance of areas where noise sources are located; and/or flight responses (*e.g.,* pinnipeds flushing into water from haulouts or rookeries).

The onset of behavioral disturbance from anthropogenic noise depends on both external factors (characteristics of noise sources and their paths) and the receiving animals (hearing, motivation, experience, demography) and is also difficult to predict (Southall *et al.,* 2007). Currently NMFS uses a received level of 160 dB re 1 µPa (rms) to predict the onset of behavioral harassment from impulse noises (such as impact pile driving), and 120 dB re 1 µPa (rms) for continuous noises (such as vibratory pile driving). For the proposed project, only 120 dB re 1 µPa (rms) is considered for effects analysis because only vibratory pile driving and removal will be employed.

The biological significance of many of these behavioral disturbances is difficult to predict, especially if the detected disturbances appear minor. However, the consequences of behavioral modification could be biologically significant if the change affects growth, survival, and/or reproduction, which depends on the severity, duration, and context of the effects.

Habitat—The primary potential impacts to marine mammal habitat are associated with elevated sound levels produced by pile driving and removal associated with marine mammal prey species. However, other potential impacts to the surrounding habitat from physical disturbance are also possible. Prey species for the various marine mammals include marine invertebrates and fish species. Short-term effects would occur to marine invertebrates during removal of existing piles. This effect is expected to be minor and short-term on the overall population of marine invertebrates in Grays Harbor. Construction will also have temporary effects on salmonids and other fish species in the project area due to disturbance, turbidity, noise, and the potential resuspension of contaminants. All in-water work will occur during the designated in-water work window, to minimize effects on juvenile salmonids.

SPLs from vibratory driving generally do not have the potential to injure or kill fish in the immediate area. Experiments have shown that fish can sense both the strength and direction of sound (Hawkins and Horner 1981). Primary factors determining whether a fish can sense a sound signal, and potentially react to it, are the frequency of the signal and the strength of the signal in relation to the natural background noise level. The level of sound at which a fish will react or alter its behavior is usually well above the detection level. Fish have been found to react to sounds when the sound level increased to about 20 dB above the detection level of 120 dB; however, the response threshold can depend on the time of year and the fish's physiological condition (Engas *et al.* 1993). Any disturbance to fish species would be short-term and fish would return to their pre-disturbance behavior once the pile driving activity ceases. The proposed construction would have little, if any, impact on the abilities of marine mammals to feed in the area where construction work is proposed.

There are no critical habitats or other biologically important areas near the proposed project location, although biologically important feeding and migration areas for gray whales have been established along the coast beyond the mouth of Grays Harbor. However, the project site is upriver to the east of the Harbor, so there will be no impacts to these areas. While harbor seals, California sea lions, and other marine mammals may be present, the area is not an established rookery or breeding ground for local populations. Additionally, during construction activity only a small fraction of the available habitat would be ensonified.

Short-term turbidity is a water quality effect of most in-water work, including pile driving. Cetaceans are not expected to be close enough to the Chehalis River Bridge to experience turbidity, and any pinnipeds will be transiting the terminal area and could avoid localized areas of turbidity. Therefore, the impact from increased turbidity levels is expected to be discountable to marine mammals.

For these reasons, any adverse effects to marine mammal habitat in the area from WSDOT's proposed project would be minor.

Estimated Take

This section provides an estimate of the number of incidental takes proposed for authorization 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 only, in the form of disruption of behavioral patterns for individual marine mammals resulting from exposure to vibratory driving. Based on the nature of the activity and the anticipated effectiveness of the mitigation measures (*i.e.,* shutdown, establishment and monitoring of harassment zones) discussed in detail below in Proposed Mitigation section), Level A harassment is neither anticipated nor proposed to be authorized.

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

Generally speaking, we estimate take by considering: (1) acoustic thresholds above which NMFS believes the best available science indicates marine mammals 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) and the number of days of activities. We note that while these basic factors can contribute to a basic calculation to provide an initial prediction of takes, additional information that can qualitatively inform take estimates is also sometimes available (*e.g.,* previous monitoring results or average group size). Below, we describe the factors considered here in more detail and present the proposed take estimate.

Acoustic Thresholds

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 μPa (rms) for continuous (*e.g.,* vibratory pile-driving, drilling) sources such as those used here.

WSDOT's proposed activity includes the use of continuous (vibratory driving and removal and, therefore, the 120 dB re 1 μPa (rms) 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) (NMFS, 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). WSDOT's proposed activity includes the use non-impulsive (vibratory driving) sources.

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

TABLE 3—THRESHOLDS IDENTIFYING THE ONSET OF PERMANENT THRESHOLD SHIFT

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

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

Note: Peak sound pressure (L_{pk}) has a reference value of 1 μPa, and cumulative sound exposure level (L_E) has a reference value of 1μPa^2s. 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.

Reference sound source levels used by WSDOT vibratory piling driving and removal activities were derived from several sources. WSDOT utilized in-water measurements generated by the Greenbusch Group (2018) from the WDOT Seattle Pier 62 project (83 FR 39709) to establish proxy sound source levels for vibratory removal of 14-inch timber piles. The results determined unweighted rms ranging from 140 dB to 169 dB. WSDOT used the 75th percentile of these values (161 dB rms measured at 10 meters) as a proxy for vibratory removal of 14-inch timber piles at the Chehalis River Bridge. However, NMFS reviewed the report by the Greenbusch Group (2018) and determined that the findings were derived by pooling together all steel pile and timber pile at various distance measurements data together. The data was not normalized to the standard 10 m distance. NMFS analyzed source measurements at different distances for all 63 individual timber piles that were removed and normalized the values to 10 m. The results showed that the median is 152 dB SPLrms. This value was used as the source level for vibratory removal of 14-inch timber piles.

The proposed project includes vibratory driving of 18 sheet piles as well as vibratory driving and removal of six steel H piles. Based on in-water measurements at the Elliot Bay Seawall Project, vibratory pile driving of steel sheet piles generated a source level of 165 dB rms measured at 10 m (Greenbush Group 2015). According to CalTrans (2015), 150 dB rms at 10 m is a typical source level for vibratory driving and removal of steel H piles.

Level B Harassment Zones

The practical spreading model was used by WSDOT to establish the Level B harassment zones for all vibratory pile installation and removal activities. Practical spreading is described in full detail below.

Pile driving generates underwater noise that can potentially result in disturbance to marine mammals in the project area. 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:

$$TL = B * \log10 (R1/R2),$$

Where:

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

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

This formula neglects loss due to scattering and absorption, which is assumed to be zero here. The degree to which underwater sound propagates away from a sound source is dependent on a variety of factors, most notably the water bathymetry and presence or absence of reflective or absorptive conditions including in-water structures and sediments. Spherical spreading occurs in a perfectly unobstructed (free-field) environment not limited by depth or water surface, resulting in a 6 dB reduction in sound level for each doubling of distance from the source (20 * log[range]). Cylindrical spreading occurs in an environment in which sound propagation is bounded by the water surface and sea bottom, resulting in a reduction of 3 dB in sound level for each doubling of distance from the source (10 * log[range]). A practical spreading value of 15 is often used under conditions where water increases with depth as the receiver moves away from the shoreline, resulting in an expected propagation environment that would lie between spherical and cylindrical spreading loss conditions.

Utilizing the practical spreading loss model, WSDOT determined the distance and area where the noise will fall below the behavioral effects threshold of 120 dB rms. The distances and areas are shown in Table 4. Note that the ensonified area is based on a GIS analysis of the area accounting for structures and landmasses which would block underwater sound transmission.

TABLE 4—LEVEL B HARASSMENT ENSONIFIED AREA

Pile type	Level B harassment zone isopleth (meters)	Area (km^2)
14-inch timber vibratory removal	1,359	0.93
Steel sheet vibratory driving	10,000	2.04
Steel H-pile vibratory driving and removal	1,000	0.67

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. 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 vibratory 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. User Spreadsheet inputs are shown in Table 5 and outputs are shown in Table 6. Note that since no Level A harassment take is proposed, the areas of Level A harassment zones were not calculated.

TABLE 5—PARAMETERS OF PILE DRIVING AND DRILLING ACTIVITY

[User spreadsheet input]

	14-inch timber	Sheet	H-Pile
Spreadsheet Tab Used	A.1) Vibratory driving	A.1) Vibratory driving	A.1) Vibratory driving
Source Level (rms SPL)	152	165	150
Weighting Factor Adjustment (kHz)	2.5	2.5	2.5
Number of piles in 24-h period	22	9	6
Duration to drive a single pile (minutes).	30	30	30
Propagation (xLogR)	15	15	15
Distance of source level measurement (meters).	10	10	10

TABLE 6—LEVEL A HARASSMENT ZONE ISOPLETHS

[User spreadsheet output]

Source type	PTS Isopleth (meters)				
	Low-frequency cetaceans	Mid-frequency cetaceans	High-frequency cetaceans	Phocid pinnipeds	Otariid pinnipeds
14-inch timber	8.5	0.8	12.5	5.2	0.4
Sheet pile	34.4	3	50.9	20.9	1.5
H-pile	2.6	0.2	3.9	1.6	0.1

Marine Mammal Occurrence

In this section we provide the information about the presence, density, or group dynamics of marine mammals that will inform the take calculations.

There is little abundance or density data available for marine mammal species that are likely to occur within Grays Harbor and which could potentially be found in the Chehalis River near the project site. In most cases, WSDOT relied on density data from the U.S. Navy Marine Species Density Database (NMSDD) (U.S. Navy 2015). NMFS concurs that this, and the exceptions described below, represent the best available data for use here.

Harbor Seal

While the NMSDD (U.S. Navy 2015) estimates the density of harbor seals in the waters offshore of Grays Harbor as 0.279 animals per square kilometer, WSDOT relied on a study which identified 44 harbor seal haul outs in Grays Harbor and provided very rough estimates of the number of seals at each site. Twenty-seven haul outs had less than 100 animals; 16 haul outs had 100–500 animals; and two haul outs were reported to support over 500 animals (Jeffries *et al.* 2000). These data likely represent the best estimate of harbor seal numbers in Grays Harbor. Using median numbers of each haul out estimate range resulted in an estimated 7,150 harbor seals in Grays Harbor. The area of the estuary during mean higher high water (243 km^2) was used to derive a density estimate of 29.4 harbor seals per square kilometer.

California Sea Lion

Only 10 California sea lion strandings have been documented between 2006 and 2015 (NMFS 2016c), and no haul outs have been identified. Therefore, it is expected that the density of California sea lions in Grays Harbor is low. The NMSDD (U.S. Navy 2015) estimates the density of California sea lions in the waters offshore of Grays Harbor as ranging from 0.020 to 0.033 animals per square kilometer in summer and fall. The higher estimate is used as a surrogate for Grays Harbor.

Steller Sea Lion

According to the NMFS National Stranding Database, there were four confirmed Steller sea lion strandings in Grays Harbor between 2006 and 2015 (NMFS 2016c) and no haul outs have been identified in Grays Harbor. The NMSDD (U.S. Navy 2015) estimates the density of Steller sea lions in the waters offshore of Grays Harbor as 0.0145 animals per square kilometer. This estimate is used as a surrogate for Grays Harbor.

Gray Whale

Between 1998 and 2010, gray whale numbers peaked in spring and fall in a study area that included waters inside Grays Harbor and coastal waters along the south Washington coast (Calambokidis, *et al.* 2012). However, no density estimates are available for Grays Harbor. The NMSDD (U.S. Navy 2015) estimates the density of gray whales in nearshore waters near Grays Harbor as 0.00045 animal per square kilometer in summer and fall. This density is used for Grays Harbor.

Harbor Porpoise

The NMSDD (U.S. Navy 2015) estimates the density of harbor porpoises in the waters offshore of Grays Harbor as a range between 0.69 and 1.67 animals per square kilometer. According to Evenson *et al.* (2016), the maximum harbor porpoise density in the Strait of Juan de Fuca (approximately 105 miles north of Grays Harbor) in 2014 was 0.768 animals per square kilometer. The higher density estimate for waters offshore of Grays Harbor (1.67) is used to estimate take.

Take Calculation and Estimation

Here we describe how the information provided above is brought together to produce a quantitative take estimate.

No Level A harassment take is likely because of the small injury zones and relatively low average animal density in the area. Since the largest Level A harassment distance is only 50.9 m from the source for high-frequency cetaceans (harbor porpoise), NMFS considers that WSDOT can effectively monitor such small zones to implement shutdown measures and avoid Level A harassment takes. Therefore, no Level A harassment take of marine mammal is proposed or authorized.

NMFS used an estimated harbor seal density of 29.4 animals/km² in the US 101/Chehalis River Bridge-Scour Repair Project area to estimate the following number of Level B harassment exposures that may occur:

- 14-inch timber pile removal: 29.4. animals/km² * 0.93 km² * 2 days = 54.68
- Sheet pile installation: 29.4 animals/km² * 2.04 km² * 2 days= 119.95
- H-pile installation and removal: 29.4 animals/km² * 0.67 km² * 2 days = 39.39

Based on the sum of the equations above, NMFS proposes to authorize 214 takes of harbor seals by Level B harassment.

NMFS inserted the California sea lion density of 0.033 animals/km² into the same equation used above for harbor seals to estimate Level B harassment exposures. Based on the sum of the equations, an estimated 0.24 California sea lions would be taken by Level B harassment. Due to this low value, NMFS conservatively proposes to authorize the take of two California sea lions each day of in-water activities, resulting in 12 takes by Level B harassment.

NMFS estimated take of Steller sea lions by inserting a density of 0.0145 animals/km² into the same equation used above for harbor seals resulting in 0.10 takes of sea lions. Given the low value, NMFS conservatively proposes to authorize the take of two Steller sea lions during each day of in-water activities, resulting in 12 takes by Level B harassment.

NMFS used the same equation that was used for harbor seals to estimate take for gray whales by inserting a density value of 0.00045 animals/km². Since this resulted in a value less than one, NMFS proposes to authorize Level B harassment take of two gray whales per day based on average group size.

A density value of 1.67 animal/km² for harbor porpoises was plugged into the harbor seal equation to arrive at an estimated 12.1 takes. Therefore, NMFS is proposing to authorize 12 harbor porpoise takes by Level B harassment.

Table 7 shows total number of authorized Level B harassment takes and take as a percentage of population for each of the species.

TABLE 7—TAKE ESTIMATES AS A PERCENTAGE OF STOCK ABUNDANCE

Species	Proposed authorized take Level B harassment	% population
Harbor seal	214	1.9
California sea lion	12	<0.01
Steller sea lion	12	<0.01
Gray whale	2	<0.01
Harbor porpoise	12	<0.01

Proposed Mitigation

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

Mitigation for Marine Mammals and Their Habitat

Temporal and Seasonal Restrictions—Timing restrictions would be used to avoid in-water work when ESA-listed salmonids are most likely to be present. The combined work window for in-water work for the U.S. 101/Chehalis River Bridge –Scour Project is July 15 through February 15. Furthermore, work may only occur during daylight hours, when visual monitoring of marine mammals can be effectively conducted.

Establishment of Shutdown Zone—For all pile driving activities, WSDOT will establish a shutdown zone. The purpose of a shutdown zone is generally to define an area within which shutdown of activity would occur upon sighting of a marine mammal (or in anticipation of an animal entering the defined area). In this case, shutdown zones are intended to contain areas in which sound pressure levels (SPLs) equal or exceed acoustic injury criteria for authorized species. If a marine mammal is observed at or within the shutdown zone, work must shut down (stop work) until the individual has been observed outside of the zone, or has not been observed for at least 15 minutes for all marine mammals. A determination that the shutdown zone is clear must be made during a period of good visibility (*i.e.,* the entire shutdown zone and surrounding waters must be visible to the naked eye). If a marine mammal approaches or enters the shutdown zone during activities or pre-activity monitoring, all pile driving and removal activities at that location must be halted or delayed, respectively. If pile driving or removal is halted or

delayed due to the presence of a marine mammal, the activity may not resume or commence until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal. Pile driving and removal 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 equipment is no more than thirty minutes. Shutdown zone sizes are shown in Table 8.

TABLE 8—SHUTDOWN ZONES FOR VARIOUS PILE DRIVING ACTIVITIES AND MARINE MAMMAL HEARING GROUPS

[Meters]

Source type	Low-frequency Cetaceans	High-frequency Cetaceans	Phocid pinnipeds	Otariid pinnipeds
14-inch timber removal	10	15	10	10
Sheet pile installation	35	50	20	10
H-pile installation and removal	10	10	10	10

For in-water heavy machinery activities other than pile driving, if a marine mammal comes within 10 m, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions. WSDOT must also implement shutdown measures if the cumulative total number of individuals observed within the Level B harassment monitoring zones for any particular species reaches the number authorized under the IHA and if such marine mammals are sighted within the vicinity of the project area and are approaching the Level B Harassment/Monitoring Zone during in-water construction activities.

Establishment of Level B Harassment/Monitoring Zones—WSDOT must identify and establish Level B harassment zones which are areas where SPLs equal or exceed 120 dB rms. Observation of monitoring zones enables observers to be aware of and communicate the presence of marine mammals in the project area and outside the shutdown zone and thus prepare for potential shutdowns of activity. Monitoring zones are also used to document instances of Level B harassment. Monitoring zone isopleths are shown in Table 4.

Pre-Activity Monitoring—Prior to the start of daily in-water construction activity, or whenever a break in pile driving of 30 minutes or longer occurs, the observer shall observe the shutdown and monitoring zones for a period of 30 minutes. The shutdown zone shall be cleared when a marine mammal has not been observed within the zone for that 30-minute period. When a marine mammal permitted for Level B harassment take is present in the Level B harassment zone, piling activities may begin and Level B harassment take shall be recorded. As stated above, if the entire Level B harassment zone is not visible at the start of construction, piling driving activities can begin. If work ceases for more than 30 minutes, the pre-activity monitoring of both the Level B harassment and shutdown zone shall commence.

Based on our evaluation of the applicant's proposed measures, NMFS has preliminarily determined that the proposed 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

Proposed Monitoring and Reporting

In order to issue an IHA for an activity, Section 101(a)(5)(D) of the MMPA states that NMFS must set forth, requirements pertaining to the monitoring and reporting of such taking. The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that 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 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.

Proposed Monitoring Measures

WSDOT shall employ NMFS-approved protected species observers (PSOs) to conduct marine mammal monitoring for its US 101/Chehalis River Bridge-Scour Repair Project. The purposes of marine mammal monitoring are to implement mitigation measures and learn more about impacts to marine mammals from WSDOT's construction activities. The PSOs will observe and collect data on marine mammals in and around the project area for 30 minutes before, during, and for 30 minutes after all pile removal and pile installation work. NMFS-approved PSOs shall meet the following requirements:

1. Independent observers (*i.e.,* not construction personnel) are required;

2. At least one observer must have prior experience working as an observer;

3. Other observers may substitute education (undergraduate degree in biological science or related field) or training for experience;

4. Where a team of three or more observers are required, one observer

should be designated as lead observer or monitoring coordinator. The lead observer must have prior experience working as an observer; and

5. NMFS will require submission and approval of observer CVs.

WSDOT must ensure that observers have the following additional qualifications:

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

2. Experience or training in the field identification of marine mammals, including the identification of behaviors;

3. Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;

4. 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

5. 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.

Monitoring of marine mammals around the construction site shall be conducted using high-quality binoculars (*e.g.,* Zeiss, 10 x 42 power). Due to the different sizes of monitoring zones from different pile types, separate zones and monitoring protocols corresponding to each specific pile type will be established.

For vibratory pile driving and pile removal of sheet piles, a total of four land-based PSOs will monitor the shutdown and Level B harassment zones. For vibratory pile driving and pile removal of H piles and timber piles, a total of three land-based PSOs will monitor the shutdown and Level B harassment zones.

Reporting Measures

WSDOT is required to submit a draft monitoring report within 90 days after completion of the construction work or the expiration of the IHA (if issued), whichever comes earlier. This report would detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed. NMFS would have an opportunity to provide comments on the report, and if NMFS has comments, WSDOT would address the comments and submit a final report to NMFS within 30 days. Reports shall contain, at minimum, the following:

- Date and time that monitored activity begins and ends for each day conducted (monitoring period);
- Construction activities occurring during each daily observation period, including how many and what type of piles driven;
- Deviation from initial proposal in pile numbers, pile types, average driving times, etc.
- Weather parameters in each monitoring period (*e.g.,* wind speed, percent cloud cover, visibility);
- Water conditions in each monitoring period (*e.g.,* sea state, tide state);
- For each marine mammal sighting:
  - Species, numbers, and, if possible, sex and age class of marine mammals;
  - Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity;
  - Location and distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;
  - Estimated amount of time that the animals remained in the Level B harassment zone
- Description of implementation of mitigation measures within each monitoring period (*e.g.,* shutdown or delay);
- Other human activity in the area within each monitoring period;
- A summary of the following:
  - Total number of individuals of each species detected within the Level B harassment zone;
  - Total number of individuals of each species detected within the shutdown zone and the average amount of time that they remained in that zone; and
  - Daily average number of individuals of each species (differentiated by month as appropriate) detected within the Level B harassment zone.

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).

NMFS has identified key qualitative and quantitative factors which may be employed to assess the level of analysis necessary to conclude whether potential impacts associated with a specified activity should be considered negligible. These include (but are not limited to) the type and magnitude of taking, the amount and importance of the available habitat for the species or stock that is affected, the duration of the anticipated effect to the species or stock, and the status of the species or stock. When an evaluation of key factors shows that the anticipated impacts of the specified activity would clearly result in no greater than a negligieble impact on all affected species or stocks, additional evaluation is not required. In this case, the following factors are in place for all affected species or stocks:

- No takes by Level A harassment are anticipated or authorized;
- Takes by Level B harassment constitute less than 5% of the best available abundance estimates for all stocks;
- Take would not occur in places and/or times where take would be more likely to accrue to impacts on reproduction or survival, such as within ESA-designated or proposed critical habitat, biologically important areas (BIA), or other habitats critical to recruitment or survival (*e.g.,* rookery);
- Take would occur over a short timeframe (less than 30 days of active pile driving required during the IHA effective period);
- Take would occur over <25% of species/stock range; and
- Stock is not known to be declining or suffering from known contributors to

decline (*e.g.,* unusual mortality event (UME), oil spill effects).

Based on these factors, and taking into consideration the implementation of the prescribed monitoring and mitigation measures, NMFS preliminarily finds that the total take from the proposed 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 Sections 101(a)(5)(A) and (D) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the number of individuals taken to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

NMFS has estimated that take for all species authorized is less than two percent of their respective stock abundance (Table 7). Based on the analysis contained herein of the proposed activity (including the proposed mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS preliminarily 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.

Endangered Species Act (ESA)

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

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to WSDOT for conducting US 101/Chehalis River Bridge-Scour Repair Project between July 15, 2019, and February 15, 2020, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. This section contains a draft of the IHA itself. The wording contained in this section is proposed for inclusion in the IHA (if issued).

1. This Authorization is valid from July 15, 2019, through February 15, 2020.

2. This Authorization is valid only for activities associated with in-water construction work at the US 101/Chehalis River Bridge-Scour Repair Project in the State of Washington.

3. General Conditions.

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

(b) The species and number of authorized Level B harassment takes are provided in Table 7.

(c) The taking by serious injury or death of any of the species listed in condition 3(b), or any taking of any other species of marine mammal not listed in condition 3(b) of the Authorization is prohibited and may result in the modification, suspension, or revocation of this IHA.

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

4. Mitigation Measures.

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

(a) In-water construction work must occur only during daylight hours.

(b) For in-water heavy machinery activities other than pile driving, if a marine mammal comes within 10 meters (m), operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions.

(c) Pre-activity marine mammal monitoring must take place from 30 minutes prior to initiation of pile driving and removal. Post-activity marine mammal monitoring must continue through 30 minutes post-completion of pile driving and removal. Pile driving and removal may commence at the end of the 30-minute pre-activity monitoring period, provided observers have determined that the relevant shutdown zone (Table 8) is clear of marine mammals.

(d) WSDOT must establish and monitor shutdown zone and Level B harassment zones:

i. Shutdown zone sizes for various pile driving activities and marine mammal hearing groups are shown in Table 8.

ii. Level B harassment zone sizes are shown in Table 3.

(e) If a marine mammal approaches or enters the shutdown zone (Table 8) during activities or pre-activity monitoring, all pile driving activities at that location must be halted or delayed, respectively. If pile driving is halted or delayed due to the presence of a marine mammal, the activity may not resume or commence until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal. 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 equipment is no more than thirty minutes.

(f) WSDOT must establish monitoring locations and protocols as described below. Please also refer to the Marine Species Monitoring Plan (Monitoring Plan; attached).

i. For vibratory pile driving of sheet piles, a total of four land-based PSOs must monitor the shutdown zone and Level B harassment zone as depicted in the Monitoring Plan.

ii. For vibratory pile removal of timber piles and vibratory installation and removal of H piles, a total of three land-based PSOs must monitor the shutdown and Level B harassment zones.

5. Monitoring.

The holder of this Authorization is required to conduct marine mammal monitoring during pile driving and removal.

(a) Monitoring during pile driving and removal must be conducted by NMFS-approved PSOs in a manner consistent with the following:

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

ii. At least one PSO must have prior experience working as a marine mammal observer during construction activities. Other PSOs may substitute education (degree in biological science or related field) or training for experience.

iii. Where a team of three or more PSOs are required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience working as a marine mammal observer during construction.

iv. WSDOT must submit PSO CVs for approval by NMFS prior to the onset of pile driving.

v. WSDOT must ensure that observers have the following additional qualifications:

a. Ability to conduct field observations and collect data according to assigned protocols.

b. Experience or training in the field identification of marine mammals, including the identification of behaviors.

c. Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations.

d. 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.

e. 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.

6. Reporting.

The holder of this Authorization is required to submit marine mammal monitoring and acoustic reports:

(a) WSDOT must submit a draft report on all marine mammal monitoring conducted under this Authorization within ninety calendar days following the completion of monitoring. A final report must be submitted within thirty days following resolution of comments on the draft report from NMFS. The marine mammal monitoring report must contain, at minimum, the informational elements described below:

i. Date and time that monitored activity begins and ends for each day conducted (monitoring period);

ii. Construction activities occurring during each daily observation period, including how many and what type of piles driven;

iii. Deviation from initial proposal in pile numbers, pile types, average driving times, etc.

iv. Weather parameters in each monitoring period (*e.g.,* wind speed, percent cloud cover, visibility);

v. Water conditions in each monitoring period (*e.g.,* sea state, tide state);

vi. For each marine mammal sighting:

a. Species, numbers, and, if possible, sex and age class of marine mammals;

b. Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity;

c. Location and distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;

d. Estimated amount of time that the animals remained in the Level B harassment zone;

vii. Description of implementation of mitigation measures within each monitoring period (*e.g.,* shutdown or delay);

viii. Other human activity in the area within each monitoring period

ix. A summary of the following:

a. Total number of individuals of each species detected within the Level B harassment zone.

b. Total number of individuals of each species detected within the Level A harassment zone and the average amount of time that they remained in that zone.

c. Daily average number of individuals of each species (differentiated by month as appropriate) detected within the Level B Zone, and estimated as taken, if appropriate.

(b) Reporting injured or dead marine mammals:

i. In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as serious injury, or mortality, WSDOT must immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS. The report must include the following information:

1. Time and date of the incident;

2. Description of the incident;

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

4. Description of all marine mammal observations and active sound source use in the 24 hours preceding the incident;

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

6. Fate of the animal(s); and

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

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

ii. In the event WSDOT discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.,* in less than a moderate state of decomposition), WSDOT must immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS. The report must include the same information identified in 6(b)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with WSDOT to determine whether additional mitigation measures or modifications to the activities are appropriate.

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

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

Request for Public Comments

We request comment on our analyses, the proposed authorization, and any other aspect of this Notice of Proposed IHA for the proposed project. We also request comment on the potential for renewal of this proposed IHA as described in the paragraph below. Please include with your comments any supporting data or literature citations to help inform our final decision on the request for MMPA authorization.

On a case-by-case basis, NMFS may issue a second one-year IHA without additional notice when (1) another year of identical or nearly identical activities as described in the Specified Activities section is planned or (2) the activities would not be completed by the time the IHA expires and a second IHA would allow for completion of the activities beyond that described in the Dates and Duration section, provided all of the following conditions are met:

- A request for renewal is received no later than 60 days prior to expiration of the current IHA;

• The request for renewal must include the following:

(1) An explanation that the activities to be conducted beyond the initial dates either are identical to the previously analyzed activities or include changes so minor (*e.g.,* reduction in pile size) that the changes do not affect the previous analyses, take estimates, or mitigation and monitoring requirements; and

(2) A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized;

• Upon review of the request for renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures remain the same and appropriate, and the original findings remain valid.

Dated: October 15, 2018.

Catherine Marzin,

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

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XG549

Endangered and Threatened Species; Take of Anadromous Fish

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

ACTION: Notice of intent to prepare a Draft Supplemental Environmental Impact Statement.

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA), this notice announces that NMFS is preparing a Draft Supplemental Environmental Impact Statement (DSEIS) to supplement information in the 2017 Draft Environmental Impact Statement (DEIS) for 10 Hatchery and Genetic Management Plans (HGMP) for salmon and steelhead hatchery programs jointly submitted by the Washington Department of Fish and Wildlife (WDFW) with the Muckleshoot Indian Tribe and the Suquamish Tribe (referred to as the co-managers), for NMFS's evaluation and determination under Limit 6 of the Endangered Species Act (ESA) 4(d) Rule for threatened salmon and steelhead. The HGMPs specify the propagation of salmon and steelhead in the Duwamish-Green River basin in Washington State. The DSEIS will analyze an additional alternative reflecting an increase in hatchery production of juvenile Chinook salmon.

DATES: Because NMFS has previously requested (81 FR 26776, May 6, 2016) and received information from the public on issues to be addressed in the EIS, and because the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) do not require additional scoping for this DSEIS process (40 CFR 1502.9(c)(4)), NMFS is not asking for further public scoping information and comment at this time. Upon release of the DSEIS, NMFS will provide a 45-day public review/comment period.

ADDRESSES: Copies of the 2017 DEIS are available from NMFS, Sustainable Fisheries Division at 510 Desmond Drive SE, Suite 103, Lacey, WA 98503, and on the web at *http://www.westcoast.fisheries.noaa.gov/hatcheries/Duwamish-Green/duw-green_hgmps_deis.html*.

FOR FURTHER INFORMATION CONTACT: Steve Leider, NMFS, by phone at (360) 753–4650, or email to *steve.leider@noaa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The WDFW, and the co-managers have jointly submitted to NMFS HGMPs for 10 hatchery programs in the Duwamish-Green River basin in Washington State. The HGMPs reviewed in the DEIS were submitted to NMFS from 2013 to 2015, pursuant to limit 6 of the 4(d) Rule for salmon and steelhead. The hatchery programs include releases of ESA-listed Chinook salmon and winter-run steelhead into the Duwamish-Green River basin. The hatchery programs also release non-listed coho and fall-run chum salmon and summer-run steelhead into the Duwamish-Green River basin. One hatchery program releases coho salmon into marine waters adjacent to the Duwamish-Green River basin. Seven of the programs are currently operating, and three are new.

NEPA requires Federal agencies to conduct environmental analyses of their proposed major actions to determine if the actions may affect the human environment. NMFS's action of determining that implementation of the co-managers' HGMPs would not appreciably reduce the likelihood of survival and recovery of affected threated ESUs under Limit 6 of the 4(d) Rule for salmon and steelhead promulgated under the ESA, is a major Federal action subject to environmental review under NEPA.

On May 4, 2016, NMFS announced its intent to prepare an EIS and the 30-day public scoping period ended on June 3, 2016. On November 3, 2017, NMFS announced the release of a DEIS for public comment. The DEIS includes an analysis of the proposed action identified in the 2016 NOI and the anticipated environmental impacts. Following an extension, the 75-day public comment period ended on January 19, 2018.

In light of subsequent information, NMFS has determined that the Final EIS would benefit from the analysis of an expanded range of potential alternatives for hatchery production of Chinook salmon. The alternative to be analyzed in the DSEIS is informed by the applicant's interest in increasing hatchery production of juvenile Chinook salmon, and NMFS' analysis of the status of endangered Southern Resident Killer Whales and the importance of Chinook salmon prey to their food base. The DSEIS will analyze an increased level of Chinook salmon hatchery production and provide the public with an opportunity for review and comment. The DSEIS, in conjunction with the 2017 DEIS, will collectively evaluate the proposed action and alternatives.

Alternatives

The alternatives analyzed in the 2017 DEIS are summarized in the DEIS Notice of Intent (82 FR 26776, May 4, 2016). The upcoming DSEIS will analyze an alternative in which hatchery production from the Soos Creek Chinook salmon program would produce an additional 2,000,000 juvenile Chinook salmon to be released at Palmer Ponds in the Duwamish-Green River basin.

Authority

The environmental review of the 10 salmon and steelhead HGMPs in the Duwamish-Green River basin of Washington State will be conducted in accordance with requirements of the NEPA of 1969 as amended (42 U.S.C. 4321 *et seq.*), NEPA Regulations (40 CFR parts 1500–1508), other appropriate Federal laws and regulations, and policies and procedures of NMFS for compliance with those regulations.