Gateway will not be creating increased sound levels in the marine environment for prolonged periods of time.

Of the 14 marine mammal species likely to occur in the area, four are listed as endangered under the ESA: North Atlantic right, humpback, and fin whales. All of these species are also considered depleted under the MMPA. There is currently no designated critical habitat or known reproductive areas for any of these species in or near the proposed project area. However, there are several well-known North Atlantic right whale feeding grounds in the Cape Cod Bay and Great South Channel. No mortality or injury is expected to occur, and due to the nature, degree, and context of the Level B harassment anticipated, the activity is not expected to impact rates of recruitment or survival. There is no critical habitat or biologically important areas for marine mammals within the proposed project area.

The population estimates for the species that may be taken by Level B behavioral harassment contained in the most recent U.S. Atlantic Stock Assessment Reports were provided earlier in this document. From the most protective estimates of both marine mammal densities in the project area and the size of the 120-dB ZOI, the maximum calculated number of individual marine mammals for each species that could potentially be harassed annually is small relative to the overall population sizes.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, NMFS finds that the proposed Northeast Gateway LNG Port and Algonquin Pipeline Lateral operations and maintenance and repair activities would result in the incidental take of small numbers of marine mammals, by Level B harassment only, and that the total taking from Northeast Gateway and Algonquin's proposed activities will have a negligible impact on the affected species or stocks.

Impact on Availability of Affected Species or Stock for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals 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)

Our November 18, 2013, **Federal Register** notice of proposed IHA described the history and status of Endangered Species Act (ESA) compliance for the NE Gateway LNG facility. As explained in that notice, the biological opinions for construction and operation of the facility only analyzed impacts on ESA-listed species from activities under the initial construction period and during operations, and did not take into consideration potential impacts to marine mammals that could result from the subsequent LNG Port and Pipeline Lateral maintenance and repair activities. In addition, NEG also revealed that significantly more water usage and vessel operating air emissions are needed from what was originally evaluated for the LNG Port operation. NMFS PR1 initiated consultation with NMFS Greater Atlantic Region Fisheries Office under section 7 of the ESA on the proposed issuance of an IHA to NEG under section 101(a)(5)(D) of the MMPA for the proposed activities that include increased NEG Port and Algonquin Pipeline Lateral maintenance and repair and water usage for the LNG Port operations this activity. A Biological Opinion was issued on November 21, 2014, and concluded that the proposed action may adversely affect but is not likely to jeopardize the continued existence of ESA-listed right, humpback, fin, and sei whales.

National Environmental Policy Act

MARAD and the USCG released a Final EIS/Environmental Impact Report (EIR) for the proposed Northeast Gateway Port and Pipeline Lateral. A notice of availability was published by MARAD on October 26, 2006 (71 FR 62657). The Final EIS/EIR provides detailed information on the proposed project facilities, construction methods and analysis of potential impacts on marine mammals.

NMFS was a cooperating agency (as defined by the Council on Environmental Quality (40 CFR 1501.6)) in the preparation of the Draft and Final EISs. NMFS reviewed the Final EIS and adopted it on May 4, 2007. NMFS issued a separate Record of Decision for issuance of authorizations pursuant to section 101(a)(5) of the MMPA for the construction and operation of the Northeast Gateway's LNG Port Facility in Massachusetts Bay. A 2010 environmental assessment/ environmental impact assessment conducted by TetraTech analyzed the increased water usage and other operational changes. We reviewed that document to determine whether there is a need for supplemental NEPA analysis based on any substantial changes between the current proposed action and the proposed action analyzed for the FEIS/EIR or any significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. Based on our review of that analysis, we have determined that supplementation was not required.

Authorization

NMFS has issued an IHA to Northeast Gateway for conducting LNG Port facility and Pipeline Lateral operations and maintenance and repair activities in Massachusetts Bay, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated.

Dated: December 23, 2014.

Donna S. Wieting,

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

[FR Doc. 2014–30539 Filed 12–30–14; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XD644

Taking of Marine Mammals Incidental to Specified Activities; Vashon Seismic Retrofit Project

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

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

SUMMARY: NMFS has received a request from the Washington State Department of Transportation (WSDOT) Ferries Division (WSF) for an authorization to take small numbers of nine species of marine mammals, by Level B harassment, incidental to proposed construction activities for Vashon Seismic Retrofit Project in Vashon Island, Washington State. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an authorization to WDOT to incidentally take, by harassment, small numbers of marine mammals for a period of 1 year.

DATES: Comments and information must be received no later than January 30, 2015.

ADDRESSES: Comments on the application should be addressed to Jolie

Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. The mailbox address for providing email comments is *itp.guan@noaa.gov.* NMFS is not responsible for email comments sent to addresses other than the one provided here. Comments sent via email, including all attachments, must not exceed a 25-megabyte file size.

Instructions: All comments received are a part of the public record and will generally be posted to *http://www.nmfs.noaa.gov/pr/permits/incidental.htm* without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

A copy of the application may be obtained by writing to the address specified above or visiting the internet at: *http://www.nmfs.noaa.gov/pr/permits/incidental.htm.* Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

FOR FURTHER INFORMATION CONTACT: Shane Guan, Office of Protected Resources, NMFS, (301) 427–8401.

SUPPLEMENTARY INFORMATION:

Background

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

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined ''negligible impact'' in 50 CFR 216.103 as ''. . . an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.''

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the U.S. can apply for a one-year authorization to incidentally take small numbers of marine mammals by harassment, provided that there is no potential for serious injury or mortality to result from the activity. Section 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny the authorization.

Summary of Request

On June 20, 2014, WSDOT submitted a request to NOAA requesting an IHA for the possible harassment of small numbers of nine marine mammal species incidental to construction associated with the Vashon Seismic Retrofit Project at the Vashon Ferry Terminal in Vashon Island, Washington between August 1, 2015, and February 15, 2016. On December 15, 2014, WSDOT added a test pile drive and removal program to the Vashon Seismic Retrofit Project and submitted a revised IHA application. The information provided here is based on WSDOT's December 15, 2014, IHA application. NMFS is proposing to authorize the Level B harassment of the following marine mammal species/stocks: harbor seal, California sea lion, Steller sea lion, killer whale (transient and Southern Resident stocks), gray whale, humpback whale, minke whale, harbor porpoise, and Dall's porpoise.

Description of the Specified Activity

Overview

WSDOT proposes to conduct Vashon Seismic Retrofit Project at the WSF Terminal in Vashon Island, Washington, to ensure the safe and reliable function of the Vashon Terminal in case of a significant earthquake.

Approximately 210-linear feet of the existing trestle in the nearshore will be replaced. Existing decking, 67 13-inch diameter creosote-treated timber piles and 39 30-inch diameter concrete-jacketed creosote-treated timber piles will be removed with a vibratory hammer. Fifty-three 24-inch diameter permanent hollow steel piles will be installed with a vibratory hammer for approximately the first 40 feet, and driven with an impact hammer for (approximately) the final 10 feet. Approximately 44 13-inch diameter temporary untreated timber piles will be installed with an impact hammer to support the weight of a crane that will sit on the trestle to drive the permanent steel piles.

Seismic bracing will be installed at up to 11 locations and will consist of a maximum of 66 24-inch diameter hollow steel piles installed with an impact hammer. Seismic bracing piles will be connected with concrete caps that tie each cluster of piles together.

Approximately 52 temporary 24-inch diameter hollow steel piles will be required to support temporary false-work and work trestles necessary to install the seismic braces concrete caps. Each work trestle will consist of approximately 6 piles. These piles will be driven with a vibratory hammer and then proofed with an impact hammer to ensure they will bear the weight of the false-work and concrete caps.

In addition, one double walled, one Mandrel and one control pile (three total) will be driven to the east of the Vashon trestle during the Seismic Retrofit project in 2015 or 2016 as part of the test pile program. The goal is to test the drivability of these piles in harder soils, and to test the rate of noise attenuation.

Dates and Duration

WSDOT plans to conduct all in-water construction work activities during the period from August 1, 2015, to February 15, 2016.

The number of days it will take to complete the partial trestle replacement and install the seismic bracings depends on the difficulty in penetrating the substrate during pile installation. It is assumed that only one vibratory or impact hammer will be in operation at a time. Durations are conservative, and the actual amount of time to install and remove piles will likely be less. Duration estimates of each of the pile driving/removal elements follow:

- For the partial trestle replacement:
  - Impact driving of temporary timber piles will take approximately 30 minutes per pile, with 3 piles installed per day over 17 days.
  - Vibratory driving of each permanent 24-inch steel pile will take approximately 60 minutes, followed by approximately 30 minutes of impact driving (approximately 600 strikes per pile), with 2–5 piles installed per day over 27 days.
  - o Vibratory removal of temporary timber piles, and existing timber and concrete-jacketed timber piles will take approximately 30 minutes per pile, with 5–10 piles removed per day over 30 days.

- For the seismic braces:
  - Vibratory driving of each temporary 24-inch steel pile will take approximately 20 minutes, followed by approximately 10 minutes of impact proofing (approximately 60 strikes per pile), with 2–4 piles installed per day over 28 days.
  - Impact driving of permanent 24-inch steel piles will take approximately two hours per pile, requiring approximately 3,000 strikes per pile, with approximately 2–4 piles installed per day over 28 days.
  - Vibratory removal of temporary 24-inch steel piles will take approximately 30 minutes pile, with up to 3–10 piles removed per day over 20 days.
- For the test pile:
  - Impact driving of each 30-inch steel pile will take approximately 40 minutes, (approximately 3,000 strikes per pile), with 3 piles installed over 1–2 days.
  - Vibratory removal of each pile will take approximately 40 minutes per pile, over 1–2 days.

The maximum anticipated number of days for pile driving is 100. The maximum anticipated number of days for pile removal is 50. The worst-case time for pile installation and removal is 311 hours over 150 days.

Specified Geographic Region

The proposed activities will occur at the Vashon Ferry Terminal located in Vashon, Washington (Figure 1–2 of the IHA application). The Vashon Ferry Terminal, serving State Route 160, is located at the north end of Vashon Island, in King County, Washington. The terminal is part of what is known as the Triangle Route between West Seattle (Fauntleroy terminal), Vashon Island and the Kitsap Peninsula (Southworth terminal). The Vashon terminal is located in Section 6, Township 23 North, Range 3 East, and is adjacent to Colvos Passage to the west and south, and the East Passage to the east, both tributary to Puget Sound (Figure 1–2 of the IHA application). Land use in the area is a mix of residential, business, small scale agriculture, Blake Island State Park, and local parks.

Detailed Description of Vashon Seismic Retrofit Project

The following construction sequence is anticipated:

- For the nearshore partial trestle replacement, work will proceed in stages as the crane advances away from the shore:
  - impact drive temporary timber piles,
  - vibratory/impact drive permanent 24-inch diameter hollow steel piles,
  - advance to next section,
- Temporary timber piles, and existing timber and concrete-jacketed timber piles will either be removed with a vibratory hammer as the crane advances away from shore, or will be removed after all permanent steel piles are installed, as the crane retreats towards the shore.
- When the partial trestle replacement is complete:
  - 67 13-inch diameter existing timber piles and 39 30-inch diameter existing concrete-jacketed timber piles will have been removed with a vibratory hammer.
  - 44 temporary 13-inch diameter timber piles will have been installed with an impact hammer, and removed with a vibratory hammer.
  - 53 permanent 24-inch hollow steel piles will have been installed with a vibratory and impact hammer.
- The seismic braces will be installed sequentially:
  - Vibratory drive/impact proof temporary 24-inch diameter hollow steel piles,
  - impact drive permanent 24-inch diameter hollow steel piles,
  - construct temporary false-work and concrete cap,
  - remove false-work,
  - remove temporary 24-inch diameter hollow steel piles with a vibratory hammer,
  - advance to next brace location.
- When the seismic braces are complete:
  - 52 temporary 24-inch diameter hollow steel piles will have been installed using a vibratory hammer/proofed with an impact hammer and removed with a vibratory hammer.
  - 66 permanent 24-inch diameter hollow steel piles will have been installed with an impact hammer.

Detailed descriptions of these activities are provided below.

1. Vibratory Hammer Pile Driving and Removal

Vibratory hammers are commonly used in steel pile driving where sediments allow and involve the same vibratory hammer used in pile removal. The pile is 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. The type of vibratory hammer that will be used for the project will likely be an APE 400 King Kong (or equivalent) with a drive force of 361 tons.

2. Impact Hammer Pile Installation

Impact hammers are used to install plastic/steel core, wood, concrete, or steel piles. An impact hammer is a steel device that works like a piston. Impact hammers are usually large, though small impact hammers are used to install small diameter plastic/steel core piles. Impact hammers have guides (called a lead) that hold the hammer in alignment with the pile while a heavy piston moves up and down, striking the top of the pile, and drives it into the substrate from the downward force of the hammer on the top of the pile.

To drive the pile, the pile is first moved into position and set in the proper location using a choker cable or vibratory hammer. Once the pile is set in place, pile installation with an impact hammer can take less than 15 minutes under good conditions to over an hour under poor conditions (such as glacial till and bedrock, or exceptionally loose material in which the pile repeatedly moves out of position).

Detailed Description of Test Pile Program

One double walled, one Mandrel and one control pile (three total) will be driven to the east of the Vashon trestle during the Seismic Retrofit project in 2015 or 2016. The location shown on the sheet is approximate, as construction staging may require that it be moved. All test piles are 30'' hollow steel. The control pile will use a bubble curtain for attenuation. No unattenuated strikes will be allowed. The test will take place in water –10 to –25 ft (−3 to −8 m) mean lower low water (MLLW). Piles will be driven approximately 40 ft (13 m) into the sediment. The test should be complete in one day, though two days are proposed in case of complications.

Piles will be impact driven and removed with a vibratory hammer. It is possible that some or all of the piles will not be able to be removed. In that case, the pile(s) will be cut below the mudline, and filled with sand to the natural grade.

Description of Marine Mammals in the Area of the Specified Activity

The marine mammal species under NMFS jurisdiction most likely to occur in the proposed construction area include Pacific harbor seal (*Phoca vitulina richardsi*), California sea lion (*Zalophus californianus*), Steller sea lion (*Eumetopias jubatus*), killer whale (*Orcinus orca*) (transient and Southern Resident stocks), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), minke whale (*Balaenoptera acutorostrata*), harbor porpoise (*Phocoena phocoena*), and Dall's porpoise (*P. dali*).

General information on the marine mammal species found in California waters can be found in Caretta *et al.* (2014), which is available at the following URL: *http://www.nmfs.noaa.gov/pr/sars/pdf/po2013.pdf.* Refer to that document for information on these species. Specific information concerning these species in the vicinity of the proposed action area is provided below.

Harbor Seal

Harbor seals are members of the true seal family (Phocidae). There are three distinct west coast stocks: (1) Inland waters of Washington State (including Hood Canal, Puget Sound, Georgia Basin and the Strait of Juan de Fuca out to Cape Flattery), (2) outer coast of Oregon and Washington, and (3) California (Carretta *et al.* 2007).

Pupping seasons vary by geographic region. For the southern Puget Sound region, pups are born from late June through September (WDFW 2012a). After October 1 all pups in the inland waters of Washington are weaned.

Harbor seals are the most numerous pinniped in the inland marine waters of Washington (Calambokidis and Baird 1994). Jeffries *et al.* (2003) recorded a mean count of 9,550 harbor seals in Washington's inland marine waters and estimated the total population to be approximately 14,612 animals (including the Strait of Juan de Fuca). The population across Washington increased at an average annual rate of 10 percent between 1991 and 1996 (Jeffries *et al.* 1997) and is thought to be stable (Jeffries *et al.* 2003).

The nearest documented harbor seal haulout site to the Vashon ferry terminal is 9.7 km northwest. The number of harbor seals using the haulout is less than 100 (WDFW 2000).

Harbor seals have been observed hauled-out on a boat ramp to the east of the Vashon Ferry Terminal trestle and on a beach to the west of the trestle (Stateler 2013, WSF 2009).

In 2009 WSDOT replaced several dolphin structures (structure used to reduce wave action) at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, four harbor seals were observed near the terminal, three swimming and one hauled-out on the beach to the west of the trestle (WSF 2009).

According to the NMFS National Stranding Database, there were 38 confirmed harbor seal strandings in the Vashon area in 2010–2013 in the September-February work window scheduled for this project (NMFS 2014).

Harbor seals are not ''depleted'' under the MMPA or listed as ''threatened'' or ''endangered'' under the ESA. The Washington Inland Waters stock of harbor seals is not classified as a ''strategic'' stock. The stock is also considered within its Optimum Sustainable Population level (Jeffries *et al.* 2003).

Harbor seals are the most numerous marine mammal species in Puget Sound. Harbor seals are non-migratory; their local movements are associated with such factors as tides, weather, season, food availability and reproduction (Scheffer and Slipp 1948; Fisher 1952; Bigg 1969, 1981). They are not known to make extensive pelagic migrations, although some long-distance movements of tagged animals in Alaska (174 km) and along the U.S. west coast (up to 550 km) have been recorded (Pitcher and McAllister 1981; Brown and Mate 1983; Herder 1983).

Harbor seals haul out on rocks, reefs and beaches, and feed in marine, estuarine and occasionally fresh waters. Harbor seals display strong fidelity for haulout sites (Pitcher and Calkins 1979; Pitcher and McAllister 1981).

The nearest documented harbor seal haulout site to the Vashon ferry terminal is 9.7 km northwest. The level of use of this haulout during the fall and winter is unknown but is expected to be much less as air temperatures become colder than water temperatures resulting in seals in general hauling out less. Harbor seals may also use other undocumented haulout sites in the area.

Transient killer whales often forage to the east of Allen Bank for harbor seals (Sears 2013), which is within the project zone of influence (ZOI). NW Blake Island, just north of Vashon Island is a 'hot-spot' for seals that are prey for Transients (Stateler 2013).

California Sea Lion

The U.S. stock of California sea lion was estimated at 296,750 in the 2011 SAR (NMFS 2011) and may be at carrying capacity, although more data are needed to verify that determination (Carretta *et al.* 2007). Some 3,000 to 5,000 animals are estimated to move into northwest waters (both Washington and British Columbia) during the fall (September) and remain until the late spring (May) when most return to breeding rookeries in California and Mexico (Jeffries *et al.* 2000). Peak counts of over 1,000 animals have been made in Puget Sound (Jeffries *et al.* 2000).

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, four California sea lions swimming near the terminal (WSF 2009).

From November of 2012 to February of 2014, the U.S. Navy collected sightings data of California sea lions hauled-out on the Rich Passage float and buoy. In the September to February timeframe scheduled for this project, the Navy reported a total of 646 California sea lions over 14 days of observation, with a high of 110 on January 14, 2014 (U.S. Navy 2014).

According to the NMFS National Stranding Database, there were four confirmed California sea lion strandings in the Vashon area in 2010–2013, in the September-February work window scheduled for this project.

California sea lions are not listed as endangered or threatened under the ESA or as depleted under the MMPA. They are not considered a strategic stock under the MMPA, because total human-caused mortality, although unknown, is likely to be well less than the PBR (9,200) (NMFS 2011).

California sea lions breed on islands off Baja Mexico and southern California with primarily males migrating north to feed in the northern waters (Everitt *et al.* 1980). Females remain in the waters near their breeding rookeries off California and Mexico. All age classes of males are seasonally present in Washington waters (WDFW 2000).

California sea lions were unknown in Puget Sound until approximately 1979 (Steiger and Calambokidis 1986). Everitt *et al.* (1980) reported the initial occurrence of large numbers at Port Gardner, Everett (northern Puget Sound) in the spring of 1979. The number of California sea lions using the Everett haulout numbered around 1,000. This haulout remains the largest in the state for sea lions in general and for California sea lions specifically. Similar sightings and increases in numbers were documented throughout the region after the initial sighting in 1979 (Steiger and Calambokidis 1986), including urbanized areas such as Elliott Bay near Seattle and heavily used areas of central Puget Sound (Gearin *et al.* 1986). In Washington, California sea lions use haulout sites within all inland water regions (WDFW 2000). The movement of California sea lions into Puget Sound could be an expansion in range of a growing population (Steiger and Calambokidis 1986).

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 haulout if approached.

The nearest documented California sea lion haulout site to the Vashon ferry terminal is 7.8 km NW (WDFW 2000).

Steller Sea Lion

Steller sea lions comprise two recognized management stocks (eastern and western), separated at 144°W longitude (Loughlin 1997). Only the eastern stock is considered here because the western stock occurs outside of the geographic area of the proposed activity. Breeding rookeries for the eastern stock are located along the California, Oregon, British Columbia, and southeast Alaska coasts but not along the Washington coast or in inland Washington waters (Angliss and Outlaw 2007). Steller sea lions primarily use haulout sites on the outer coast of Washington and in the Strait of Juan de Fuca along Vancouver Island in British Columbia. Only sub-adults or non-breeding adults may be found in the inland waters of Washington (Pitcher *et al.* 2007).

The eastern stock was estimated at 52,847 individuals in the 2012 SAR, and the most recent estimate for Washington state (including the outer coast) is 516 individuals (non-pups only) (NMFS 2012a). However, there are estimates that 1,000 to 2,000 individuals enter the Strait of Juan de Fuca during the fall and winter months.

Steller sea lion numbers in Washington State decline during the summer months, which correspond to the breeding season at Oregon and British Columbia rookeries (approximately late May to early June) and peak during the fall and winter months (WDFW 2000). A few Steller sea lions can be observed year-round in Puget Sound although most of the breeding age animals return to rookeries in the spring and summer.

Steller sea lions were listed as threatened range-wide under the ESA on November 26, 1990 (55 FR 49204). After division into two stocks, the western stock was listed as endangered under the ESA on May 4, 1997 and the eastern stock remained classified as threatened (62 FR 24345). In 2006 the NMFS Steller sea lion recovery team proposed removal of the eastern stock from listing under the ESA based on its annual rate of increase of approximately 3% since the mid-1970s. The eastern stock was delisted in November 2013.

On August 27, 1993, NMFS published a final rule designating critical habitat for the Steller sea lion. No critical habitat was designated in Washington. Critical habitat is associated with breeding and haulout areas in Alaska, California, and Oregon (NMFS 1993).

Steller sea lions are listed as depleted under the MMPA. Both stocks are classified as strategic.

Adult Steller sea lions congregate at rookeries in Oregon, California, and British Columbia for pupping and breeding from late May to early June (Gisiner 1985). 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).

For Washington inland waters, Steller sea lion abundances vary seasonally with a minimum estimate of 1,000 to 2,000 individuals present or passing through the Strait of Juan de Fuca in fall and winter months. The number of haulout sites has increased in recent years.

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, no Steller sea lions were observed (WSF 2009).

From November of 2012 to February of 2014, the U.S. Navy collected sightings data of Steller sea lions hauled-out on the Rich Passage float and buoy. In the September to February timeframe scheduled for this project, the Navy reported a total of 48 Steller sea lions over 14 days of observation, with a high of 9 in January 14, 2014 (U.S. Navy 2014).

According to the NMFS National Stranding Database, there were no Steller sea lion strandings in the Vashon area in 2010–13.

Killer Whale

Two sympatric ecotypes of killer whales are found within the proposed activity area: transient and resident. These types vary in diet, distribution, acoustic calls, behavior, morphology, and coloration (Baird 2000; Ford *et al.* 2000). The ranges of transient and resident killer whales overlap; however, little interaction and high reproductive isolation occurs among the two ecotypes (Barrett-Lennard 2000; Barrett-Lennard and Ellis 2001; Hoelzel *et al.* 2002. Resident killer whales are primarily piscivorous, whereas transients primarily feed on marine mammals, especially harbor seals (Baird and Dill 1996). Resident killer whales also tend to occur in larger (10 to 60 individuals), stable family groups known as pods, whereas transients occur in smaller (less than 10 individuals), less structured pods.

Two stocks of resident killer whales occur in Washington State: The Southern Resident and Northern Resident stocks. Southern Residents occur within the activity area, in the Strait of Juan de Fuca, Strait of Georgia, and in coastal waters off Washington and Vancouver Island, British Columbia. Northern Residents occur primarily in inland and coastal British Columbia and Southeast Alaska waters and rarely venture into Washington State waters. Little interaction (Ford *et al.* 2000) or gene flow (Barrett-Lennard 2000; Barrett-Lennard and Ellis 2001) is known to occur between the two resident stocks.

The Southern Residents live in three family groups known as the J, K and L pods. The entire Southern Resident population has been annually recorded since 1973 (Krahn *et al.* 2004). Individual whales are identified through photographs of unique saddle patch and dorsal fin markings. Each Southern Resident pod has a distinctive dialect of vocalizations (Ford 1989) and calls can travel 10 miles or more underwater. Southern Resident killer whale forage primarily on salmon, with Chinook salmon considered the major prey in the Puget Sound region in late spring through the fall. Other identified prey included chum salmon, other salmonids, herring, and rockfish (NMFS 2008).

Small population numbers make Southern Residents vulnerable to inbreeding depression and catastrophic events such as disease or a major oil spill. Ongoing threats to Southern Residents include declining prey resources, environmental contaminants, noise and physical disturbance (Krahn *et al.* 2004; Wiles 2004). In Washington's inland waters, high levels of noise disturbance and potential behavior disruption are due to recreational boating traffic, private and commercial whale watching boats and commercial vessel traffic (Wiles 2004). Other potential noise disturbance includes high output military sonar equipment and marine construction. Noise effects may include altered prey movements and foraging efficiency, masking of whale calls, and temporary hearing impairment (Krahn *et al.* 2004).

The Southern Resident stock was first recorded in a 1974 census, at which time the population comprised 71 whales. This population peaked at 97 animals in 1996, declined to 79 by 2001 (Center for Whale Research 2011), and then increased to 89 animals by 2006 (Carretta *et al.* 2007). As of December 2013, the population collectively numbers 80 individuals: J pod has 25 members, K pod has 19 members, and L pod has 36 members (Center for Whale Research 2013).

The Southern Resident stock has declined from 97 individuals is due to a decrease in birth rates and an increase in mortalities, especially among the L pod (Krahn *et al.* 2004). There are a limited number of reproductive-age Southern Resident males, and several females of reproductive age are not having calves. Three major threats were identified in the ESA listing: Reduced quantity and quality of prey; persistent pollutants that could cause immune or reproductive system dysfunction; and effects from vessels and sound (NMFS 2008). Other threats identified were demographics, small population size, and vulnerability to oil spills. Previously, declines in the Southern Resident population were due to shooting by fishermen, whalers, sealers and sportsmen largely due to their interference with fisheries (Wiles 2004) and the aquarium trade, which is estimated to have taken a significant number of animals from 1967 to 1973 (Ford *et al.* 1995). According to the 2012 SAR, the PBR is 0.14 animals (NMFS 2012).

The Southern Resident stock was declared depleted under the MMPA in May 2003. At that time, NMFS announced preparation of a conservation plan to restore the stock to its optimal sustainable population. On November 18, 2005, the Southern Resident killer whale stock was listed as an endangered distinct population segment (DPS) under the ESA. On November 29, 2006, NMFS published a final rule designating critical habitat for the Southern Resident killer whale DPS. Both Puget Sound and the San Juan Islands are designated as core areas of critical habitat under the ESA, excluding areas less than 20 feet deep relative to extreme high water.

In Washington State, killer whales were listed as a state candidate species in 2000. In April 2004, the state upgraded their status to a state endangered species.

Southern Residents are documented in coastal waters ranging from central California to the Queen Charlotte Islands, British Columbia (NMFS 2008). They occur in all inland marine waters within the activity area. While in the activity area, resident killer whales generally spend more time in deeper water and only occasionally enter water less than 15 feet deep (Baird 2000). Distribution is strongly associated with areas of greatest salmon abundance, with heaviest foraging activity occurring over deep open water and in areas characterized by high-relief underwater topography, such as subsurface canyons, seamounts, ridges, and steep slopes (Wiles 2004).

Records from 1976 through 2006 document Southern Residents in the inland waters of Washington during the months of March through June and October through December, with the primary area of occurrence in inland waters north of Admiralty Inlet, located in north Puget Sound (The Whale Museum 2008).

Beginning in May or June and through the summer months, all three pods (J, K and L) of Southern Residents are most often located in the protected inshore waters of Haro Strait (west of San Juan Island), in the Strait of Juan de Fuca, and Georgia Strait near the Fraser River. Historically, the J pod also occurred intermittently during this time in Puget Sound; however, records from The Whale Museum (2008) from 1997 through 2007 show that J pod did not enter Puget Sound south of the Strait of Juan de Fuca from approximately June through August.

In fall, all three Southern Resident killer whale pods occur in areas where migrating salmon are concentrated such as the mouth of the Fraser River. They may also enter areas in Puget Sound where migrating chum and Chinook salmon are concentrated (Osborne 1999). In the winter months, the K and L pods spend progressively less time in inland marine waters and depart for coastal waters in January or February. The J pod is most likely to appear year-round near the San Juan Islands, and in the fall/winter, in the lower Puget Sound and in Georgia Strait at the mouth of the Fraser River.

Southern Resident killer whales are present in the Vashon Island area in November–January, coinciding with chum salmon runs, with peak sightings in November/December. Southern Resident killer whales commonly forage for salmon on the east side of Vashon Island. They tend to pass through the Vashon area, traveling at approximately 4 mph, rather than staying in the area (Sears 2013).

Ann Stateler of the Vashon Hydrophone Project (and a Vashon Island resident) has been observing whales in the area since 1994. Her observations since 2005 show that the broad window for Southern Resident killer whale presence in the Vashon area has been from October to March, with most encounters occurring between November and January. Prey samples collected by Mark Sears and NOAA researchers in local waters indicate that the Southern Resident killer whales are targeting Chum and Chinook salmon.

Southern Resident killer whales use all of the waterways surrounding Vashon/Maury Island: East Passage, Colvos Pass, Dalco Pass, waters off the north end between Blake and Vashon Islands. Sometimes the Southern Resident killer whales circumnavigate the island. Southern Resident killer whale visits to the Vashon area have been highly variable. Typically, members of all three pods are observed over a year, with the exception of 2006 when J Pod was not present for the first time since observations have been recorded.

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, no killer whales were observed (WSF 2009).

According to the NMFS National Stranding Database, there were no killer whale strandings in the Vashon area in 2010–13 (NMFS 2014).

The West Coast Transient stock occurs in Washington State. This stock ranges from southern California to southeast Alaska and is distinguished from two other Eastern North Pacific transient stocks that occur further north, the AT1 and the ''Gulf of Alaska transient stocks. This separation was based on variations in acoustic calls and genetic distinctness (Angliss and Outlaw 2007). West Coast transients primarily forage on harbor seals (Ford and Ellis 1999), but other species such as porpoises and sea lions are also taken (NMFS 2008).

The West Coast Transient stock, which includes individuals from California to southeastern Alaska, was estimated to have a minimum number of 354 in the 2010 SAR (NMFS 2010).

Trends in abundance for the West Coast Transients were unavailable in the most recent stock assessment report (Angliss and Outlaw 2007). Human-caused mortality and serious injury are estimated to be zero animals per year and do not exceed the PBR, which is estimated at 3.5 animals (NMFS 2010).

The West Coast Transient stock is not designated as depleted under the MMPA or listed as ''threatened'' or ''endangered'' under the ESA.

Within the inland waters, Transients may frequent areas near seal rookeries when pups are weaned (Baird and Dill 1995). West Coast Transients are documented intermittently year-round in Washington inland waters.

Transient sightings have become more common since the mid-2000s. Unlike the Southern Resident killer whale pods, Transients may be present in the area for hours as they hunt pinnipeds. Transients often forage to the east of Allen Bank, which is within the project ZOI. NW Blake Island, just north of Vashon Island is a 'hot-spot' for seals

that are prey for Transients. Transients may be more present during September/October harbor seal pup weaning.

Gray Whale

The North Pacific gray whale stock is divided into two distinct geographically isolated stocks: Eastern and western ''Korean.'' Individuals in this region are part of the Eastern North Pacific stock. The majority of the Eastern North Pacific population spends summers feeding in the Bering and Chukchi Seas, but some individuals have been reported summering in waters off the coast of British Columbia, Southeast Alaska, Washington, Oregon and California (Rice *et al.* 1984; Angliss and Outlaw 2007). Gray whales migrate in the fall, south along the coast of North America to Baja California, Mexico to calve (Rice *et al.* 1981.) Gray whales are recorded in Washington waters during feeding migrations between late spring and autumn with occasional sightings during winter months (Calambokidis *et al.* 1994, 2002).

Early in the 20th century, it is believed that commercial hunting for gray whales reduced population numbers to below 2,000 individuals (Calambokidis and Baird 1994). Population surveys since the delisting estimate that the population fluctuates at or just below the carrying capacity of the species (~26,000 individuals) (Rugh *et al.* 1999; Calambokidis *et al.* 1994; Angliss and Outlaw 2007).

According to the 2013 SAR, the minimum population estimate of the Eastern North Pacific stock is 18,017 (NMFS 2011c). Within Washington waters, gray whale sightings reported to Cascadia Research and the Whale Museum between 1990 and 1993 totaled over 1,100 (Calambokidis *et al.* 1994). Abundance estimates calculated for the small regional area between Oregon and southern Vancouver Island, including the San Juan Area and Puget Sound, suggest there were 137 to 153 individual gray whales from 2001 through 2003 (Calambokidis *et al.* 2004). Forty-eight individual gray whales were observed in Puget Sound and Hood Canal in 2004 and 2005 (Calambokidis 2007).

After listing of the species under the ESA in 1970, the number of gray whales increased dramatically resulting in their delisting in 1994. In 2001 NOAA Fisheries received a petition to relist the stock under the ESA, but it was determined that there was not sufficient information to warrant the petition (Angliss and Outlaw 2007). Since delisting under the ESA, the stock has not been reclassified under the MMPA. The PBR for this stock is 360 animals per year (NMFS 2011).

Gray whales migrate within 5 to 43 km of the coast of Washington during their annual north/south migrations (Green *et al.* 1995). Gray whales migrate south to Baja California where they calve in November and December, and then migrate north to Alaska from March through May (Rice *et al.* 1984; Rugh *et al.* 2001) to summer and feed. A few gray whales are observed in Washington inland waters between the months of September and January, with peak numbers of individuals from March through May. Peak months of gray whale observations in the area of activity occur outside the proposed work window of September through February. The average tenure within Washington inland waters is 47 days and the longest stay was 112 days.

Although typically seen during their annual migrations on the outer coast, a regular group of gray whales annually comes into the inland waters at Saratoga Passage and Port Susan from March through May to feed on ghost shrimp (Weitkamp *et al.* 1992). During this time frame they are also seen in the Strait of Juan de Fuca, the San Juan Islands, and areas of Puget Sound, although the observations in Puget Sound are highly variable between years (Calambokidis *et al.* 1994).

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, no gray whales were observed (WSF 2009).

According to the NMFS National Stranding Database, there were no gray whale strandings in the Vashon area in 2010–13 (NMFS 2014).

Humpback Whale

Humpback whales are wide-ranging baleen whales that can be found virtually worldwide. Recent studies have indicated that there are three distinct stocks of humpback whale in the North Pacific: California-Oregon-Washington (formerly Eastern North Pacific), Central North Pacific and Western North Pacific (NMFS 2011).

The California-Oregon-Washington (CA–OR–WA) stock may be found near the project site. This stock calves and mates in coastal Central America and Mexico and migrates up the coast from California to southern British Columbia in the summer and fall to feed (NMFS 1991; Marine Mammal Commission 2003; Carretta *et al.* 2007). Although infrequent, interchange between the other two stocks and the CA–OR–WA stock occurs in breeding areas (Carretta *et al.* 2007). Few CA–OR–WA stock humpback whales are seen in Puget Sound, but more frequent sightings occur in the Strait of Juan de Fuca and near the San Juan Islands. Most sightings are in spring and summer. Humpback whales feed on krill, small shrimp-like crustaceans and various kinds of small fish.

According to the 2013 SAR, the 2007/2008 estimate of 2,043 humpback whales is the best estimate for abundance for this stock, though it does exclude some whales in Washington (Calambokidis *et al.* 2009).

As a result of commercial whaling, humpback whales were listed as ''endangered'' under the Endangered Species Conservation Act of 1969. This protection was transferred to the Endangered Species Act (ESA) in 1973. The species is still listed as ''endangered'', and consequently the stock is automatically considered as a ''depleted'' and ''strategic'' stock under the MMPA.

Historically, humpback whales were common in inland waters of Puget Sound and the San Juan Islands (Calambokidis *et al.* 2002). In the early part of this century, there was a productive commercial hunt for humpbacks in Georgia Strait that was probably responsible for their long disappearance from local waters (Osborne *et al.* 1988). Since the mid-1990s, sightings in Puget Sound have increased. Between 1996 and 2001, Calambokidis *et al.* (2002) recorded six individuals south of Admiralty Inlet (northern Puget Sound).

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, no humpback whales were observed (WSF 2009).

According to the NMFS National Stranding Database, there were no humpback whale strandings in the Vashon area in 2010–13 (NMFS 2014).

Minke Whales

The northern minke whale is part of the Northern Pacific stock, which is broken into three management stocks: The Alaskan, California/Oregon/Washington, and the Hawaiian stock (NMFS 2008). The California/Oregon/Washington management stock is considered a resident stock, which is unlike the other Northern Pacific stocks (NMFS 2008). This stock includes minke whales within the inland Washington waters of Puget Sound and the San Juan Islands (Dorsey *et al.* 1990; Carretta *et al.* 2007), which may be present in the project area.

Minke whales have small, dark sleek bodies and a small dorsal fin. These

whales are often recognized by surfacing snout first and a shallow but visible ''bushy'' blow. Minke whales feed by side lunging into schools of prey and gulping in large amounts of water. Food sources typically consist of krill, copepods, and small schooling fish, such as anchovies, herring, mackerel, and sand lance (NMFS 2008).

According to the 2013 SAR, the minimum population estimate of the CA/OR/WA stock is 202 and is likely no more than 600 (NE Pacific Minke Project 2014). Information on minke whale population and abundance is limited due to difficulty in detection. Conducting surveys for the minke whale is difficult because of their low profiles, indistinct blows, and tendency to occur as single individuals (Green *et al.* 1992). Over a 10-year period, 30 individuals were photographically identified in the U.S./Canada trans-boundary area around the San Juan Islands and demonstrated high site fidelity (Dorsey *et al.* 1990; Calambokidis and Baird 1994). In a single year, up to 19 individuals were photographically identified from around the San Juan Islands (Dorsey *et al.* 1990).

Minke whales are not listed under the ESA and are classified as non-depleted under the MMPA. The annual mortality due to fisheries and ship strikes is less than the potential biological removal, so they are not considered a strategic management stock under the MMPA (Carretta *et al.* 2007). The PBR for this stock is two animals per year (NMFS 2011).

Minke whales are reported in Washington inland waters year-round, although few are reported in the winter (Calambokidis and Baird 1994). Minke whales are relatively common in the San Juan Islands and Strait of Juan de Fuca (especially around several of the banks in both the central and eastern Strait), but are relatively rare in Puget Sound.

In the 1980s minke whales were found in three main areas around the San Juan Islands; west of Shaw Island (Minke Lake), the San Juan Channel and the Strait of San Juan de Fuca (Salmon Bank). However, by the 1990s the first two areas were abandoned, and minke whales were only found in the Strait of Juan de Fuca, despite continued search efforts in the other areas. This coincided with a general decline of herring in the area, possibly associated with disturbance of adjacent herring spawning grounds. A qualitative change in the number of sea birds was also noted at this time. In more recent years (2005–2011), minke whales were found foraging in all three areas again, and bird numbers were also higher. But minke whales are still predominantly found on the banks in the Strait of Juan de Fuca (NE Pacific Minke Whale Project 2014).

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, no Minke whales were observed (WSF 2009).

According to the NMFS National Stranding Database, there were no Minke whale strandings in the Vashon area in 2010–13 (NMFS 2014).

Harbor Porpoises

The Washington Inland Waters Stock of harbor porpoise may be found near the project site. The Washington Inland Waters Stock occurs in waters east of Cape Flattery (Strait of Juan de Fuca, San Juan Island Region, and Puget Sound).

According to the 2013 SAR, the Washington Inland Waters Stock mean abundance estimate based on 2002 and 2003 aerial surveys conducted in the Strait of Juan de Fuca, San Juan Islands, Gulf Islands, and Strait of Georgia is 10,682 harbor porpoises (NMFS 2011).

No harbor porpoises were observed within Puget Sound proper during comprehensive harbor porpoise surveys (Osmek *et al.* 1994) or Puget Sound Ambient Monitoring Program (PSAMP) surveys conducted in the 1990s (WDFW 2008). Declines were attributed to gill-net fishing, increased vessel activity, contaminants, and competition with Dall's porpoise.

However, populations appear to be rebounding with increased sightings in central Puget Sound (Carretta *et al.* 2007) and southern Puget Sound (WDFW 2008). Recent systematic boat surveys of the main basin indicate that at least several hundred and possibly as many as low thousands of harbor porpoise are now present. While the reasons for this recolonization are unclear, it is possible that changing conditions outside of Puget Sound, as evidenced by a tripling of the population in the adjacent waters of the Strait of Juan de Fuca and San Juan Islands since the early 1990s, and the recent higher number of harbor porpoise mortalities in coastal waters of Oregon and Washington, may have played a role in encouraging harbor porpoise to explore and shift into areas like Puget Sound (Hanson *et. al.* 2011).

The Washington Inland Waters Stock of harbor porpoise is ''non-depleted'' under MMPA and ''unlisted'' under the ESA. Because there is no current estimate of minimum abundance, a PBR cannot be calculated for this stock (NMFS 2011).

Harbor porpoises are common in the Strait of Juan de Fuca and south into Admiralty Inlet, especially during the winter, and are becoming more common south of Admiralty Inlet. Little information exists on harbor porpoise movements and stock structure near the Vashon area, although it is suspected that in some areas harbor porpoises migrate (based on seasonal shifts in distribution). Washington Department of Fish and Wildlife's (WDFW) Puget Sound Ambient Monitoring Program (PSAMP) data show peaks in Washington waters to occur during the winter.

Hall (2004) found that the frequency of sighting of harbor porpoises decreased with increasing depth beyond 150 m with the highest numbers observed at water depths ranging from 61 to 100 m. Although harbor porpoises have been spotted in deep water, they tend to remain in shallower shelf waters (<150 m) where they are most often observed in small groups of one to eight animals (Baird 2003). Water depths within the Vashon ZOIs range from 0 to 246 m, with roughly 2/3 of the area within the ZOI falling within the 61–100 m depth where the highest number of harbor porpoises may be observed.

According to Vashon Island area whale specialist Mark Sears, harbor porpoise are seen in groups of 2–3, and occasionally in groups of 6–12, and numbers in the area peak in May/June (Sears 2013).

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, one harbor porpoise was observed (WSF 2009).

According to the NMFS National Stranding Database, there was one harbor porpoise stranding in the Vashon area in 2010–13, in the September-February work window scheduled for this project (NMFS 2013).

Dall's Porpoises

The California, Oregon, and Washington Stock of Dall's porpoise may be found near the project site. The most recent estimate of Dall's porpoise stock abundance is 42,000, based on 2005 and 2008 summer/autumn vessel-based line transect surveys of California, Oregon, and Washington waters (NMFS 2011). Within the inland waters of Washington and British Columbia, this species is most abundant in the Strait of Juan de Fuca east to the San Juan Islands. The most recent Washington's inland waters estimate is 900 animals

(Calambokidis *et al.* 1997). Prior to the 1940s, Dall's porpoises were not reported in Puget Sound.

The California, Oregon, and Washington Stock of Dall's porpoise is ''non-depleted'' under the MMPA, and ''unlisted'' under the ESA. The PBR for this stock is 257 Dall's porpoises per year (NMFS 2011).

Dall's porpoises are migratory and appear to have predictable seasonal movements driven by changes in oceanographic conditions (Green *et al.* 1992, 1993) and are most abundant in Puget Sound during the winter (Nysewander *et al.* 2005; WDFW 2008). Despite their migrations, Dall's porpoises occur in all areas of inland Washington at all times of year, but with different distributions throughout Puget Sound from winter to summer. The Washington State Department of Fish and Wildlife's (WDFW) Puget Sound Ambient Monitoring Program (PSAMP) data show peaks in Washington waters to occur during the winter. The average winter group size is three animals (WDFW 2008).

In 2009 WSDOT replaced several dolphin structures at the Vashon terminal. Marine mammal monitoring was implemented during this project. Over 7 days of monitoring in November of 2009, no Dall's porpoise were observed (WSF 2009).

Dall's porpoise used to be more common that harbor porpoise in the Vashon area, though harbor porpoise is now more common. The usual observation in the Vashon area is a single Dall's porpoise, or a pair (Sears 2013).

According to the NMFS National Stranding Database, there were no Dall's porpoise strandings in the Vashon area in 2010–13 (NMFS 2013).

Potential Effects of the Specified Activity on Marine Mammals

When considering the influence of various kinds of sound on the marine environment, it is necessary to understand that different kinds of marine life are sensitive to different frequencies of sound. Based on available behavioral data, audiograms have been derived using auditory evoked potentials, anatomical modeling, and other data, Southall *et al.* (2007) designate ''functional hearing groups'' for marine mammals and estimate the lower and upper frequencies of functional hearing of the groups. The functional groups and the associated frequencies are indicated below (though animals are less sensitive to sounds at the outer edge of their functional range and most sensitive to sounds of frequencies within a smaller range somewhere in the middle of their functional hearing range):

- Low frequency cetaceans (13 species of mysticetes): functional hearing is estimated to occur between approximately 7 Hz and 22 kHz (however, a study by Au et al., (2006) of humpback whale songs indicate that the range may extend to at least 24 kHz);
- Mid-frequency cetaceans (32 species of dolphins, six species of larger toothed whales, and 19 species of beaked and bottlenose whales): functional hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High frequency cetaceans (eight species of true porpoises, six species of river dolphins, Kogia, the franciscana, and four species of cephalorhynchids): functional hearing is estimated to occur between approximately 200 Hz and 180 kHz; and
- Pinnipeds in Water: functional hearing is estimated to occur between approximately 75 Hz and 75 kHz, with the greatest sensitivity between approximately 700 Hz and 20 kHz.

As mentioned previously in this document, marine mammal species/stocks are likely to occur in the proposed seismic survey area. WSDOT and NMFS determined that in-water pile removal and pile driving during the Vashon Seismic Retrofit Project has the potential to result in behavioral harassment of the marine mammal species and stocks in the vicinity of the proposed activity.

Marine mammals exposed to high-intensity sound repeatedly or for prolonged periods can experience hearing threshold shift (TS), which is the loss of hearing sensitivity at certain frequency ranges (Kastak *et al.* 1999; Schlundt *et al.* 2000; Finneran *et al.* 2002; 2005). TS can be permanent (PTS), in which case the loss of hearing sensitivity is unrecoverable, or temporary (TTS), in which case the animal's hearing threshold will recover over time (Southall *et al.* 2007). Since marine mammals depend on acoustic cues for vital biological functions, such as orientation, communication, finding prey, and avoiding predators, hearing impairment could result in the reduced ability of marine mammals to detect or interpret important sounds. Repeated noise exposure that causes TTS could lead to PTS.

Experiments on a bottlenose dolphin (*Tursiops truncates*) and beluga whale (*Delphinapterus leucas*) showed that exposure to a single watergun impulse at a received level of 207 kPa (or 30 psi) peak-to-peak (p-p), which is equivalent to 228 dB (p-p) re 1 μPa, resulted in a 7 and 6 dB TTS in the beluga whale at 0.4 and 30 kHz, respectively. Thresholds returned to within 2 dB of the pre-exposure level within 4 minutes of the exposure (Finneran *et al.* 2002). No TTS was observed in the bottlenose dolphin. Although the source level of one hammer strike for pile driving is expected to be much lower than the single watergun impulse cited here, animals being exposed for a prolonged period to repeated hammer strikes could receive more noise exposure in terms of sound exposure level (SEL) than from the single watergun impulse (estimated at 188 dB re 1 μPa^2-s) in the aforementioned experiment (Finneran *et al.* 2002).

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). Masking is the obscuring of sounds of interest by other sounds, often at similar frequencies. Masking generally occurs when sounds in the environment are louder than, and of a similar frequency as, auditory signals an animal is trying to receive. Masking can interfere with 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.

Masking occurs at the frequency band which the animals utilize. Since noise generated from in-water vibratory pile removal and driving is mostly concentrated at low frequency ranges, it may have little effect on high-frequency echolocation sounds by odontocetes (toothed whales), which may hunt California sea lion and harbor seal. However, the lower frequency man-made noises are more likely to affect the detection of communication calls and other potentially important natural sounds, such as surf and prey noise. The noises may also affect communication signals when those signals 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 *et al.* 2009).

Unlike TS, masking can potentially impact the species at community, population, 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 in the world's oceans have

increased by as much as 20 dB (more than 3 times, in terms of SPL) from pre-industrial periods, and most of these increases are from distant shipping (Hildebrand 2009). All anthropogenic noise sources, such as those from vessel traffic and pile removal and driving, contribute to the elevated ambient noise levels, thus intensifying masking.

Nevertheless, the sum of noise from WSDOT's proposed Vashon Seismic Retrofit Project construction activities is confined to a limited area by surrounding landmasses; therefore, the noise generated is not expected to contribute to increased ocean ambient noise. In addition, due to shallow water depths in the project area, underwater sound propagation of low-frequency sound (which is the major noise source from pile driving) is expected to be poor.

Finally, in addition to TS and masking, exposure of marine mammals 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 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 expected to be biologically significant if the change affects growth, survival, or reproduction. Some of these types of significant behavioral modifications include:

Drastic change in diving/surfacing patterns (such as those thought to be causing beaked whale strandings due to exposure to military mid-frequency tactical sonar); habitat abandonment due to loss of desirable acoustic environment; and cessation of feeding or social interaction.

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 therefore difficult to predict (Southall *et al.* 2007).

The proposed project area is not a prime habitat for marine mammals, nor is it considered an area frequented by marine mammals. Therefore, behavioral disturbances that could result from anthropogenic noise associated with WSDOT's construction activities are expected to affect only a small number of marine mammals on an infrequent and limited basis.

Potential Effects on Marine Mammal Habitat

The primary potential impacts to marine mammal habitat are associated with elevated sound levels produced by vibratory pile removal and pile driving in the area. However, other potential impacts to the surrounding habitat from physical disturbance are also possible.

Potential Impacts on Prey Species

With regard to fish as a prey source for cetaceans and pinnipeds, fish are known to hear and react to sounds and to use sound to communicate (Tavolga *et al.* 1981) and possibly avoid predators (Wilson and Dill 2002). Experiments have shown that fish can sense both the strength and direction of sound (Hawkins 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 (Ona 1988); however, the response threshold can depend on the time of year and the fish's physiological condition (Engas *et al.* 1993). In general, fish react more strongly to pulses of sound rather than non-pulse signals (such as noise from vessels) (Blaxter *et al.* 1981), and a quicker alarm response is elicited when the sound signal intensity rises rapidly compared to sound rising more slowly to the same level.

Further, during the coastal construction only a small fraction of the available habitat would be ensonified at any given time. Disturbance to fish species would be short-term and fish would return to their pre-disturbance behavior once the pile driving activity ceases. Thus, the proposed construction would have little, if any, impact on the abilities of marine mammals to feed in the area where construction work is planned.

Finally, the time of the proposed construction activity would avoid the spawning season of the ESA-listed salmonid species.

Water and Sediment Quality

Short-term turbidity is a water quality effect of most in-water work, pile removal and driving. WSDOT must comply with state water quality standards during these operations by limiting the extent of turbidity to the immediate project area.

Roni and Weitkamp (1996) monitored water quality parameters during a pier replacement project in Manchester, Washington. The study measured water quality before, during and after pile removal and driving. The study found that construction activity at the site had ''little or no effect on dissolved oxygen, water temperature and salinity,'' and turbidity (measured in nephelometric turbidity units [NTU]) at all depths nearest the construction activity was typically less than 1 NTU higher than stations farther from the project area throughout construction.

Similar results were recorded during pile removal operations at two WSF ferry facilities. At the Friday Harbor terminal, localized turbidity levels (from three timber pile removal events) were generally less than 0.5 NTU higher than background levels and never exceeded 1 NTU. At the Eagle Harbor maintenance facility, local turbidity levels (from removal of timber and steel piles) did not exceed 0.2 NTU above background levels. In general, turbidity associated with pile installation is localized to about a 25-foot radius around the pile (Everitt *et al.* 1980).

Cetaceans are not expected to be close enough to the Vashon ferry terminal to experience effects of 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.

Pile driving and removal at the Vashon ferry terminal will not obstruct movements of marine mammals. Pile work at Vashon will occur within 70 m/230 ft of the shoreline leaving 2 km/1.2 miles of Puget Sound for marine mammals to pass.

Potential Impacts on Availability of Affected Species or Stock for Taking for Subsistence Uses

No subsistence harvest of marine mammals occur in the proposed action area.

Proposed Mitigation Measures

In order to issue an incidental take authorization under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse

impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses.

For WSDOT's proposed Vashon Seismic Retrofit Project, WSDOT worked with NMFS and proposed the following mitigation measures to minimize the potential impacts to marine mammals in the Project vicinity. The primary purposes of these mitigation measures are to minimize sound levels from the activities, to monitor marine mammals within designated ZOI corresponding to NMFS' current Level B harassment thresholds and, if marine mammals with the ZOI appear disturbed by the work activity, to initiate immediate shutdown or power down of the piling hammer, making it very unlikely potential injury or TTS to marine mammals would occur and ensuring that Level B behavioral harassment of marine mammals would be reduced to the lowest level practicable.

Use of Noise Attenuation Devices

Noise attenuation systems (*i.e.,* bubble curtains) will be used during all impact pile driving of steel piles to dampen the acoustic pressure and reduce the impact on marine mammals. By reducing underwater sound pressure levels at the source, bubble curtains would reduce the area over which Level B harassment would occur, thereby potentially reducing the numbers of marine mammals affected. In addition, the bubble curtain system would reduce sound levels below the threshold for injury (Level A harassment) and thus eliminate the need for an exclusion zone for Level A harassment.

Time Restriction

Work would occur only during daylight hours, when visual monitoring of marine mammals can be conducted. In addition, all in-water construction will be limited to the period between August 1, 2015, and February 15, 2016.

Establishment of Exclusion Zone and Level B Harassment Zones of Influence

Before the commencement of in-water pile driving activities, WSDOT shall establish Level B behavioral harassment ZOIs where received underwater sound pressure levels (SPLs) are higher than 160 dB (rms) and 120 dB (rms) re 1 μPa for impulse noise sources (impact pile driving) and non-impulses noise sources (vibratory pile driving and mechanic dismantling), respectively.

For the test pile program, because glacial till soils will be harder to drive through, the assumed attenuation will be 8–10 dB, the same bubble-curtain attenuation used in the current consultation. Based on the 2009 Vashon Test Pile, source levels for impact driving of 30'' piles are 210 dB (peak), 181 dB (SEL), and 189 dB (rms) measured at 16 m (Pile P–8 Unmitigated) (WSDOT 2010).

The exclusion zones for Level A harassment and ZOIs for Level B harassment are modeled based on in-water measurements during the WSF Bainbridge Island Ferry Terminal and presented in Table 2 below.

TABLE 2—MODELED MAXIMUM LEVEL A AND LEVEL B HARASSMENT ZONES FOR VARIOUS PILE DRIVING ACTIVITIES

Pile driving methods	Distance to 190 dB re 1 μPa (rms) (m)	Distance to 180 dB re 1 μPa (rms) (m)	Distance to 160 dB re 1 μPa (rms) (m)	Distance to 121* dB re 1 μPa (rms) (m)
Impact pile driving	3.0	12	251	NA
Vibratory pile driving & removal (24-in steel concrete-jacketed pile)	NA	NA	NA	5,000
Vibratory pile driving & removal (13-in timber pile)	NA	NA	NA	2,000
Vibratory pile removal (30-in steel pile)	NA	NA	NA	21,500
Test pile impact pile driving (assume 8 dB reduction using attenuation devices)	4.0	19	402	NA

* Since the median ambient noise level at the Project area is 121 dB re 1 μPa (rms), this level will be used as the threshold for vibratory pile driving and removal.

Soft Start

A ''soft-start'' technique is intended to allow marine mammals to vacate the area before the pile driver reaches full power. Whenever there has been downtime of 30 minutes or more without pile driving, the contractor will initiate the driving with ramp-up procedures described below.

Soft start for vibratory hammers requires contractors to initiate hammer noise for 15 seconds at reduced energy followed by a 1-minute waiting period. The procedure will be repeated two additional times. Soft start for impact hammers requires contractors to provide an initial set of three strikes from the impact hammer at 40 percent energy, followed by a 1-minute waiting period, then two subsequent three-strike sets. Each day, WSDOT will use the soft-start technique at the beginning of pile driving or removal, or if pile driving or removal has ceased for more than one hour.

Shutdown Measures

WSDOT shall implement shutdown measures if a marine mammal is sighted approaching the Level A exclusion zone. In-water construction activities shall be suspended until the marine mammal is sighted moving away from the exclusion zone, or if the animal is not sighted for 30 minutes after the shutdown.

In addition, WSDOT shall implement shutdown measures if southern resident killer whales are sighted within the vicinity of the project area and are approaching the Level B harassment zone (zone of influence, or ZOI) during in-water construction activities.

If a killer whale approaches the ZOI during pile driving or removal, and it is unknown whether it is a Southern Resident killer whale or a transient killer whale, it shall be assumed to be a Southern Resident killer whale and WSDOT shall implement the shutdown measure.

If a Southern Resident killer whale or an unidentified killer whale enters the ZOI undetected, in-water pile driving or pile removal shall be suspended until the whale exits the ZOI to avoid further level B harassment.

Further, WSDOT shall implement shutdown measures if the number of any allotted marine mammal takes reaches the limit under the IHA, if such marine mammals are sighted within the vicinity of the project area and are approaching the Level B harassment

zone during in-water construction activities.

Mitigation Conclusions

NMFS has carefully evaluated the applicant's proposed mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another:

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

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

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

(2) A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of pile driving and pile removal or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).

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

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

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

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

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

Proposed Monitoring and Reporting

In order to issue an incidental take authorization (ITA) 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 ITAs 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. WSDOT submitted a marine mammal monitoring plan as part of the IHA application. It can be found at *http://www.nmfs.noaa.gov/pr/permits/incidental.htm.* The plan may be modified or supplemented based on comments or new information received from the public during the public comment period.

Monitoring measures prescribed by NMFS should accomplish one or more of the following general goals:

(1) An increase in the probability of detecting marine mammals, both within the mitigation zone (thus allowing for more effective implementation of the mitigation) and in general to generate more data to contribute to the analyses mentioned below;

(2) An increase in our understanding of how many marine mammals are likely to be exposed to levels of pile driving that we associate with specific adverse effects, such as behavioral harassment, TTS, or PTS;

(3) An increase in our understanding of how marine mammals respond to stimuli expected to result in take and how anticipated adverse effects on individuals (in different ways and to varying degrees) may impact the population, species, or stock (specifically through effects on annual rates of recruitment or survival) through any of the following methods:

- Behavioral observations in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Physiological measurements in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Distribution and/or abundance comparisons in times or areas with concentrated stimuli versus times or areas without stimuli;

(4) An increased knowledge of the affected species; and

(5) An increase in our understanding of the effectiveness of certain mitigation and monitoring measures.

Proposed Monitoring Measures

WSDOT shall employee NMFS-approved protected species observers (PSOs) to conduct marine mammal monitoring for its Vashon Seismic Retrofit Project. 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. If a PSO observes a marine mammal within a ZOI that appears to be disturbed by the work activity, the PSO will notify the work crew to initiate shutdown measures.

Monitoring of marine mammals around the construction site shall be conducted using high-quality binoculars (*e.g.,* Zeiss, 10 x 42 power). Marine mammal visual monitoring will be conducted by land-based biologists at the terminal work sites, and boat-based biologist(s) travel through the monitoring area.

Data collection during marine mammal monitoring will consist of a count of all marine mammals by species, a description of behavior (if possible), location, direction of movement, type of construction that is occurring, time that pile replacement work begins and ends, any acoustic or visual disturbance, and time of the observation. Environmental conditions such as weather, visibility, temperature, tide level, current, and sea state would also be recorded.

Proposed Reporting Measures

WSDOT would be required to submit weekly monitoring reports to NMFS that summarize the monitoring results,

construction activities, and environmental conditions.

A final monitoring report would be submitted to NMFS within 90 days after completion of the construction work. 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.

In addition, NMFS would require WSDOT to notify NMFS' Office of Protected Resources and NMFS' Stranding Network within 48 hours of sighting an injured or dead marine mammal in the vicinity of the construction site. WSDOT shall provide NMFS with the species or description of the animal(s), the condition of the animal(s) (including carcass condition, if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available).

In the event that WSDOT finds an injured or dead marine mammal that is not in the vicinity of the construction area, WSDOT would report the same information as listed above to NMFS as soon as operationally feasible.

Estimated Take by Incidental Harassment

Except with respect to certain activities not pertinent here, the MMPA defines ''harassment'' as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

As discussed above, in-water pile removal and pile driving (vibratory and impact) generate loud noises that could potentially harass marine mammals in the vicinity of WSDOT's proposed Vashon Seismic Retrofit Project.

Currently, NMFS uses 120 dB re 1 μPa and 160 dB re 1 μPa at the received levels for the onset of Level B harassment from non-impulse (vibratory pile driving and removal) and impulse sources (impact pile driving) underwater, respectively. Table 3 summarizes the current NMFS marine mammal take criteria.

TABLE 3—CURRENT ACOUSTIC EXPOSURE CRITERIA FOR NON-EXPLOSIVE SOUND UNDERWATER

Criterion	Criterion definition	Threshold
Level A Harassment (Injury)	Permanent Threshold Shift (PTS) (Any level above that which is known to cause TTS).	180 dB re 1 μPa (cetaceans), 190 dB re 1 μPa (pinnipeds), root mean square (rms).
Level B Harassment	Behavioral Disruption (for impulse noises)	160 dB re 1 μPa (rms).
Level B Harassment	Behavioral Disruption (for non-impulse noise)	120 dB re 1 μPa (rms).

As explained above, ZOIs will be established that encompass the areas where received underwater sound pressure levels (SPLs) exceed the applicable thresholds for Level B harassment. There will not be a zone for Level A harassment in this case, because the bubble curtain system will keep all underwater noise below the threshold for Level A harassment.

Sound Levels From Proposed Construction Activity

As mentioned earlier, the project includes impact driving and proofing of 24-inch hollow steel piling, impact driving of 13-inch timber piling, and impact driving of 30-inch steel test piles.

Based on in-water measurements during the WSF Bainbridge Island Ferry Terminal, impact pile driving of a 24-inch steel pile generated 170 dB RMS (overall average), with the highest measured at 189 dB RMS measured at 10 meters (Laughlin 2005). A bubble curtain will be used to attenuate steel pile impact driving noise.

For the test pile program, the more conservative cetacean injury zone (19 m/62 ft) will be used to set the 30-inch steel test pile exclusion zone.

In-water measurements for impact driving of 13-inch timber piling are not available. Impact driving of 12-inch timber piling generated 170 dB RMS (WSF 2014). The source level for 13-inch timber piles shall be assumed to be the same as 12-inch timber piles. A bubble curtain will not be used during impact driving of timber piles.

Using practical spreading model to calculate sound propagation loss, Table 2 provides the estimated maximum distances for a variety of harassment zones.

As explained above, exclusion zones and ZOIs will be established that encompass the areas where received underwater SPLs exceed the applicable thresholds for Level A and Level B harassment, respectively.

Incidental take for each species is estimated by determining the likelihood of a marine mammal being present within a ZOI during pile removal and pile driving. Expected marine mammal presence is determined by past observations and general abundance near the Vashon Ferry Terminal during the construction window. Typically, potential take is estimated by multiplying the area of the ZOI by the local animal density. This provides an estimate of the number of animals that might occupy the ZOI at any given moment. However, there are no density estimates for any Puget Sound population of marine mammals. As a result, the take requests were estimated using local marine mammal data sets (*e.g.,* Orca Network, state and federal agencies), opinions from state and federal agencies, and observations from Navy biologists.

Based on the estimates, approximately 1,919 Pacific harbor seals, 1,919 California sea lions, 644 Steller sea lions, 438 harbor porpoises, 136 Dall's porpoises, 54 killer whales (50 transient, 4 Southern Resident killer whales), 71 gray whales, 36 humpback whales, and 36 minke whales could be exposed to received sound levels that could result in takes from the proposed Vashon Seismic Retrofit Project. A summary of the estimated takes is presented in Table 4.

TABLE 4—ESTIMATED NUMBERS OF MARINE MAMMALS THAT MAY BE EXPOSED TO RECEIVED PILE REMOVAL LEVELS ABOVE 121 dB RE 1 μPA (RMS)

Species	Estimated marine mammal takes	Abundance	Percentage
Pacific harbor seal	1,919	14,612	13
California sea lion	1,919	296,750	0.7
Steller sea lion	644	63,160	1.0
Harbor porpoise	438	10,682	4.0
Dall's porpoise	136	42,000	0.3
Killer whale, transient	50	521	9.6
Killer whale, Southern Resident	4	85	4.7
Gray whale	71	19,126	0.4
Humpback whale	36	1,918	1.9
Minke whale	36	478	7.5

Analysis and Preliminary Determinations

Negligible Impact

Negligible impact is ''an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival'' (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.,* population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be ''taken'' through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, etc.), the context of any responses (critical reproductive time or location, migration, etc.), as well as the number and nature of estimated Level A harassment takes, the number of estimated mortalities, and effects on habitat.

WSDOT's proposed Vashon Seismic Retrofit Project would involve pile removal and pile driving activities. Elevated underwater noises are expected to be generated as a result of these activities; however, these noises are expected to result in no mortality or Level A harassment and limited, if any, Level B harassment of marine mammals. WSDOT would use noise attenuation devices (*i.e.,* bubble curtains) during the impact pile driving of steel piles, thus eliminating the potential for injury (including PTS) and TTS from impact driving. For vibratory pile removal and pile driving and impact pile driving of timber piles, noise levels are not expected to reach the level that may cause TTS, injury (including PTS), or mortality to marine mammals. Therefore, NMFS does not expect that any animals would experience Level A harassment (including injury or PTS) or Level B harassment in the form of TTS from being exposed to in-water pile removal and pile driving associated with WSDOT's construction project.

In addition, WSDOT's proposed activities are localized and of short duration. The entire project area is limited to WSDOT's Vashon ferry terminal in Vashon Island. The entire project would involve the removal of 106 existing timber piles and installation of 119 steel piles. In addition, 96 temporary piles will be installed and then removed during the project. The duration for pile driving and removal lasts for about 10 to 120 minutes per pile, depending on the type and dimension of the pile. These low-intensity, localized, and short-term noise exposures may cause brief startle reactions or short-term behavioral modification by the animals. These reactions and behavioral changes are expected to subside quickly when the exposures cease. Moreover, the proposed mitigation and monitoring measures are expected to reduce potential exposures and behavioral modifications even further. Additionally, no important feeding and/or reproductive areas for marine mammals are known to be near the proposed action area. Therefore, the take resulting from the proposed Vashon Seismic Retrofit Project is not reasonably expected to, and is not reasonably likely to, adversely affect the marine mammal species or stocks through effects on annual rates of recruitment or survival.

The project also is not expected to have significant adverse effects on affected marine mammals' habitat, as analyzed in detail in the ''Anticipated Effects on Marine Mammal Habitat'' section. The project activities would not modify existing marine mammal habitat. The activities may cause some fish to leave the area of disturbance, thus temporarily impacting marine mammals' foraging opportunities in a limited portion of the foraging range; but, because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

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

Small Number

Based on analyses provided above, it is estimated that approximately 1,919 harbor seals, 1,919 California sea lions, 644 Steller sea lions, 438 harbor porpoises, 136 Dall's porpoises, 50 transient killer whales, 4 Southern Resident killer whales, 71 gray whales, 36 humpback whales, and 36 minke whales could be exposed to received noise levels that could cause Level B behavioral harassment from the proposed construction work at the Vashon ferry terminal in Washington State. These numbers represent approximately 0.3% to 14% of the populations of these species that could be affected by Level B behavioral harassment, respectively (see Table 2 above), which are small percentages relative to the total populations of the affected species or stocks.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures,

which are expected to reduce the number of marine mammals potentially affected by the proposed action, NMFS preliminarily finds that small numbers of marine mammals will be taken relative to the populations of the affected species or stocks.

Impact on Availability of Affected Species for Taking for Subsistence Uses

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

Endangered Species Act (ESA)

The humpback whale and the Southern Resident stock of killer whale are the only marine mammal species currently listed under the ESA that could occur in the vicinity of WSDOT's proposed construction projects. NMFS' Permits and Conservation Division has initiated consultation with NMFS' Protected Resources Division under section 7 of the ESA on the issuance of an IHA to WSDOT under section 101(a)(5)(D) of the MMPA for this activity. Consultation will be concluded prior to a determination on the issuance of an IHA.

National Environmental Policy Act (NEPA)

NMFS prepared a draft Environmental Assessment (EA) for the proposed issuance of an IHA, pursuant to NEPA, to determine whether or not this proposed activity may have a significant effect on the human environment. This analysis will be completed prior to the issuance or denial of this proposed IHA.

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to WSDOT for conducting the Vashon Seismic Retrofit Project, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The proposed IHA language is provided next.

1. This Authorization is valid from August 1, 2015, through July 31, 2016.

2. This Authorization is valid only for activities associated in-water construction work at the Vashon Seismic Retrofit Project in the State of Washington.

3. (a) The species authorized for incidental harassment takings, Level B harassment only, are: Pacific harbor seal (*Phoca vitulina richardsi*), California sea lion (*Zalophus californianus*), Steller sea lion (*Eumetopias jubatus*), transient and Southern Resident killer whales (*Orcinus orca*), gray whale (*Eschrichtius robustus*), humpback whale (*Megaptera novaeangliae*), harbor porpoise (*Phocoena phocoena*), and Dall's porpoise (*Phocoena dali*).

(b) The authorization for taking by harassment is limited to the following acoustic sources and from the following activities:

- Impact and vibratory pile driving;
- Pile removal; and
- Work associated with above piling activities.

(c) The taking of any marine mammal in a manner prohibited under this Authorization must be reported within 24 hours of the taking to the West Coast Administrator (206–526–6150), National Marine Fisheries Service (NMFS) and the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at (301) 427–8401, or her designee (301–427–8418).

4. The holder of this Authorization must notify the Chief of the Permits and Conservation Division, Office of Protected Resources, at least 48 hours prior to the start of activities identified in 3(b) (unless constrained by the date of issuance of this Authorization in which case notification shall be made as soon as possible).

5. Prohibitions

(a) The taking, by incidental harassment only, is limited to the species listed under condition 3(a) above and by the numbers listed in Table 4. The taking by Level A harassment, injury or death of these species or the taking by harassment, injury or death of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this Authorization.

(b) The taking of any marine mammal is prohibited whenever the required protected species observers (PSOs), required by condition 7(a), are not present in conformance with condition 7(a) of this Authorization.

6. Mitigation

(a) Use of Noise Attenuation Devices

A pile driving energy attenuator (such as an air bubble curtain system) shall be used for all impact pile driving.

(b) Time Restriction

In-water construction work shall occur only during daylight hours, when visual monitoring of marine mammals can be conducted.

(c) Establishment of Level B Harassment Zones of Influence

(i) Before the commencement of in-water pile driving activities, WSDOT shall establish Level B behavioral harassment zones of influence (ZOIs) where received underwater sound pressure levels (SPLs) are higher than 160 dB (rms) and 120 dB (rms) re 1 μPa for impulse noise sources (impact pile driving) and non-impulses noise sources (vibratory pile driving and mechanic dismantling), respectively. The modeled isopleths for ZOIs are listed in Table 2.

(ii) Once the underwater acoustic measurements are conducted during initial test pile driving, WSDOT shall adjust the sizes of the ZOIs, and monitor these zones as described under the Proposed Monitoring section below.

(d) Monitoring of marine mammals shall take place starting 30 minutes before pile driving begins until 30 minutes after pile driving ends.

(e) Soft Start

(i) When there has been downtime of 30 minutes or more without pile driving, the contractor will initiate the driving with ramp-up procedures described below.

(ii) For vibratory hammers, the contractor shall initiate the driving for 15 seconds at reduced energy, followed by a 1 minute waiting period. This procedure shall be repeated two additional times before continuous driving is started. This procedure shall also apply to vibratory pile extraction.

(iii) For impact driving, an initial set of three strikes would be made by the hammer at 40-percent energy, followed by a 1-minute waiting period, then two subsequent three-strike sets at 40-percent energy, with 1-minute waiting periods, before initiating continuous driving.

(f) Power Down and Shutdown Measures

(i) WSDOT shall implement shutdown measures if southern resident killer whales (SRKWs) are sighted within the vicinity of the project area and are approaching the Level B harassment zone (zone of influence, or ZOI) during in-water construction activities.

(ii) If a killer whale approaches the ZOI during pile driving or removal, and it is unknown whether it is a SRKW or a transient killer whale, it shall be assumed to be a SRKW and WSDOT shall implement the shutdown measure identified in 6(f)(i).

(iii) If a SRKW enters the ZOI undetected, in-water pile driving or pile removal shall be suspended until the SRKW exits the ZOI to avoid further level B harassment.

(iv) WSDOT shall implement shutdown measures if the number of any allotted marine mammal takes

reaches the limit under the IHA, if such marine mammals are sighted within the vicinity of the project area and are approaching the Level B harassment zone during pile removal activities.

7. Monitoring

(a) Protected Species Observers

WSDOT shall employee NMFS-approved PSOs to conduct marine mammal monitoring for its construction project.

(i) Visual acuity in both eyes (correction is permissible) sufficient for discernment of moving targets at the water's surface with ability to estimate target size and distance. Use of binoculars will be required to correctly identify the target.

(ii) Experience or training in the field identification of marine mammals (cetaceans and pinnipeds).

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

(iv) 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.

(v) Experience and ability to conduct field observations and collect data according to assigned protocols (this may include academic experience).

(vi) Writing skills sufficient to prepare a report of observations that would include such information as the number and type of marine mammals observed; the behavior of marine mammals in the project area during construction, dates and times when observations were conducted; dates and times when in-water construction activities were conducted; and dates and times when marine mammals were present at or within the defined ZOI.

(b) Monitoring Protocols: PSOs shall be present on site at all times during pile removal and driving.

(i) A range finder or hand-held global positioning system device will be used to ensure that the 120 dB_{rms} re 1 µPa Level B behavioral harassment ZOI is monitored.

(ii) A 30-minute pre-construction marine mammal monitoring will be required before the first pile driving or pile removal of the day. A 30-minute post-construction marine mammal monitoring will be required after the last pile driving or pile removal of the day. If the constructors take a break between subsequent pile driving or pile removal for more than 30 minutes, then additional pre-construction marine mammal monitoring will be required before the next start-up of pile driving or pile removal.

(iii) Marine mammal visual monitoring will be conducted by land-based biologists at the terminal work sites, and boat-based biologist(s) travel through the monitoring area.

(iv) If marine mammals are observed, the following information will be documented:

(A) Species of observed marine mammals;

(B) Number of observed marine mammal individuals;

(C) Behavioral of observed marine mammals;

(D) Location within the ZOI; and

(E) Animals' reaction (if any) to pile-driving activities

(v) During vibratory pile removal and driving, one land-based biologist would monitor the area from the terminal work site, and one monitor will move among a number of access points along the southern Sinclair Inlet shore. Binoculars shall be used during marine mammal monitoring.

(vi) WSDOT shall contact the Orca Network and/or Center for Whale Research to find out the location of the nearest marine mammal sightings.

(vii) WSDOT shall also utilize marine mammal occurrence information collected by the Orca Network using hydrophone systems to maximize marine mammal detection in the project vicinity.

8. Reporting

(a) WSDOT shall provide NMFS with a draft monitoring report within 90 days of the conclusion of the construction work. This report shall detail the monitoring protocol, summarize the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed.

(b) If comments are received from the NMFS West Coast Regional Administrator or NMFS Office of Protected Resources on the draft report, a final report shall be submitted to NMFS within 30 days thereafter. If no comments are received from NMFS, the draft report will be considered to be the final report.

(c) In the unanticipated event that the construction activities clearly cause the take of a marine mammal in a manner prohibited by this Authorization (if issued), such as an injury, serious injury, or mortality, WSDOT shall immediately cease all operations and immediately report the incident to the Chief, Permits and Conservation Division, Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinators. The report must include the following information:

(i) time, date, and location (latitude/longitude) of the incident;

(ii) description of the incident;

(iii) status of all sound source use in the 24 hours preceding the incident;

(iv) environmental conditions (*e.g.,* wind speed and direction, sea state, cloud cover, visibility, and water depth);

(v) description of marine mammal observations in the 24 hours preceding the incident;

(vi) species identification or description of the animal(s) involved;

(vii) the fate of the animal(s); and

(viii) photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with WSDOT to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. WSDOT may not resume their activities until notified by NMFS via letter, email, or telephone.

(E) In the event that WSDOT discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.,* in less than a moderate state of decomposition as described in the next paragraph), WSDOT will immediately report the incident to the Chief, Permits and Conservation Division, Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinators. The report must include the same information identified above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with WSDOT to determine whether modifications in the activities are appropriate.

(F) In the event that WSDOT discovers an injured or dead marine mammal, and the lead PSO 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 shall report the incident to the Chief, Permits and Conservation Division, Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinators, within 24 hours of the discovery. WSDOT shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. WSDOT can continue its operations under such a case.

9. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein or if the

authorized taking is having more than a negligible impact on the species or stock of affected marine mammals, or if there is an unmitigable adverse impact on the availability of such species or stocks for subsistence uses.

10. A copy of this Authorization and the Incidental Take Statement must be in the possession of each contractor who performs the construction work at the Bremerton Ferry Terminals.

11. WSDOT is required to comply with the Terms and Conditions of the Incidental Take Statement corresponding to NMFS' Biological Opinion.

Dated: December 23, 2014.

Donna S. Wieting,

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

[FR Doc. 2014–30540 Filed 12–30–14; 8:45 am]

BILLING CODE 3510–22–P

THE BUREAU OF CONSUMER FINANCIAL PROTECTION

[Docket No: CFPB–2014–0038]

Privacy Act of 1974, as Amended

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Notice of a Revised Privacy Act System of Records.

SUMMARY: In accordance with the Privacy Act of 1974, as amended, the Bureau of Consumer Financial Protection, hereinto referred to as the Consumer Financial Protection Bureau (''CFPB'' or ''Bureau''), gives notice of the establishment of a revised Privacy Act System of Records.

DATES: Comments must be received no later than January 30, 2015. The new system of records will be effective February 9, 2015, unless the comments received result in a contrary determination.

ADDRESSES: You may submit comments, identified by the title and docket number (see above), by any of the following methods:

- *Electronic: privacy@cfpb.gov* or *http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Mail:* Claire Stapleton, Chief Privacy Officer, Consumer Financial Protection Bureau, 1700 G Street NW., Washington, DC 20552.
- *Hand Delivery/Courier:* Claire Stapleton, Chief Privacy Officer, Consumer Financial Protection Bureau, 1275 1st St. NE., Washington, DC 20002.

Comments will be available for public inspection and copying at 1275 1st St. NE., Washington, DC 20002 on official business days between the hours of 10 a.m. and 5 p.m. Eastern Time. You can make an appointment to inspect comments by telephoning (202) 435–7220. All comments, including attachments and other supporting materials, will become part of the public record and subject to public disclosure. You should submit only information that you wish to make available publicly.

FOR FURTHER INFORMATION CONTACT: Claire Stapleton, Chief Privacy Officer, Consumer Financial Protection Bureau, 1275 1st St. NE., Washington, DC 20002, (202) 435–7220.

SUPPLEMENTARY INFORMATION: The CFPB revises its Privacy Act System of Records Notice (SORN) ''CFPB.001—CFPB Freedom of Information Act (FOIA)/Privacy Act (PA) System.'' In revising this SORN, the CFPB is adding a new routine use to add that records may be provided to the National Archives and the Records Administration, Office of Government Information Services (OGIS), for all purposes set forth in 5 U.S.C. 552(h)(2)(A–B) and (3). It also revises the Categories of Records section to indicate that the system also includes information related to requests for OGIS assistance.

The report of the revised system of records has been submitted to the Committee on Oversight and Government Reform of the House of Representatives, the Committee on Homeland Security and Governmental Affairs of the Senate, and the Office of Management and Budget, pursuant to Appendix I to OMB Circular A–130, ''Federal Agency Responsibilities for Maintaining Records About Individuals,'' dated November 30, 2000,[1] and the Privacy Act, 5 U.S.C. 552a(r).

The revised system of records entitled ''CFPB.001–CFPB Freedom of Information Act/Privacy Act System'' is published in its entirety below.

Date: December 23, 2014.

Claire Stapleton,

Chief Privacy Officer, Bureau of Consumer Financial Protection.

CFPB.001

SYSTEM NAME:

CFPB Freedom of Information Act/Privacy Act System.

SYSTEM LOCATION:

Consumer Financial Protection Bureau, 1275 1st St. NE., Washington, DC 20002.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals covered by this system are persons who cite the Freedom of Information Act or Privacy Act to request access to records or whose information requests are treated as FOIA requests. Other individuals covered include CFPB staff assigned to process such requests, and employees who may have responsive records or are mentioned in such records. FOIA requests are subject to the PA only to the extent that they concern individuals; information pertaining to corporations and other business entities and organizations are not subject to the PA.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records in the system may contain: (1) Correspondence with the requester including initial requests and appeals; (2) documents generated or compiled during the search and processing of the request; (3) fee schedules, cost calculations, and assessed cost for disclosed FOIA records; (4) documents and memoranda supporting the decision made in response to the request, referrals, and copies of records provided or withheld; (5) CFPB staff assigned to process, consider, and respond to requests and, where a request has been referred to another agency with equities in a responsive document, information about the individual handling the request on behalf of that agency; (6) information identifying the entity that is subject to the requests or appeals; (7) requester information, including name, address, phone number, email address; FOIA tracking number, phone number, fax number, or some combination thereof; and (8) for access requests under the Privacy Act, identifying information regarding both the party who is making the written request or appeal, and the individual on whose behalf such written requests or appeals are made, including name, Social Security number (SSNs may be submitted with documentation or as proof of identification), address, phone number, email address, FOIA number, phone number, fax number, or some combination thereof. This system also consists of records related to requests for OGIS assistance.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Pub. L. 111–203, Title X, Sections 1011, 1012, 1021, codified at 12 U.S.C. 5491, 5492, 5511; The Freedom of Information Act of 1996, as amended 5

[1] Although pursuant to Section 1017(a)(4)E, of the Consumer Financial Protection Act, Public Law 111–203, the CFPB is not required to comply with OMB-issued guidance, it voluntarily follows OMB privacy-related guidance as a best practice and to facilitate cooperation and collaboration with other agencies.