



INCIDENTAL HARASSMENT AUTHORIZATION

The Washington State Department of Transportation (WSDOT) Ferry Division (WSF) is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(D)), to harass marine mammals incidental to the Mukilteo Multimodal Ferry Terminal Tank Farm Pier Removal project in Mukilteo, Snohomish County, Washington.

1. This Incidental Harassment Authorization (IHA) is valid from September 1, 2015 through August 31, 2016.
2. This IHA is valid only for vibratory removal activities associated with the tank farm pier removal project in Mukilteo, Washington.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of WSF, its designees, and work crew personnel operating under the authority of this IHA.
 - (b) The species authorized for taking are the Pacific harbor seal (*Phoca vitulina richardsi*), California sea lion (*Zalophus californianus*), Steller sea lion (*Eumetopias jubatus*), harbor porpoise (*Phocoena phocoena*), Dall's porpoise (*Phocoenoides dalli*), killer whale (*Orcinus orca*), gray whale (*Eschrichtius robustus*), and humpback whale (*Megaptera novaeangliae*)
 - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). See Table 1 (attached) for numbers of take authorized.
 - (d) The taking by injury (Level A harassment), serious injury, or death of any of the species listed in condition 3(b) of the Authorization or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA.
 - (e) WSF shall conduct briefings between construction supervisors and crews and marine mammal monitoring teams prior to the start of all pile removal activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

4. Mitigation Measures

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



- (a) For all pile removal activities, WSF shall implement a minimum shutdown zone of 10 m radius around the pile. If a marine mammal comes within or approaches the shutdown zone, such operations shall cease.
- (b) WSF shall similarly avoid direct interaction with marine mammals during in-water heavy machinery work other than pile removal activities that may occur in association with the specified activities. If a marine mammal comes within 10 m of such activity, operations shall cease and vessels shall reduce speed to the minimum level required to maintain steerage and safe working conditions, as appropriate.
- (c) WSF shall implement a Level B harassment zone corresponding to the areas in which SPLs equal or exceed 122 dB rms for pile removal activities. This disturbance zone extends 1.6 km from the site of pile removal activities.
- (d) WSF shall implement shutdown measures if Southern resident killer whales (SRKW) are observed approaching the Level B harassment zone, also referred to as the zone of influence (ZOI), during in-water construction activities.
 - (i) If a killer whale approaches the ZOI during pile removal, and it is unknown whether it is a SRKW or a transient killer whale, it shall be assumed to be a SRKW and WSF shall implement shutdown.
- (e) WSF shall establish monitoring locations as described below.
 - (i) Protected Species Observers (PSOs) shall be present on site at all times during pile removal.
 - (ii) For all pile removal activities, two land-based PSOs will monitor the area from the best observation points available for viewing of the ZOI. If weather conditions prevent adequate land-based observations, boat-based monitoring shall be implemented.
 - (iii) These observers shall record all observations of marine mammals, regardless of distance from the pile being driven, as well as behavior and potential behavioral reactions of the animals.
 - (iv) To verify the required monitoring distance, the vibratory Level B ZOI will be determined by using a range finder or hand-held global positioning system device.
- (f) Monitoring shall take place from 30 minutes prior to initiation of pile removal activities activity through thirty minutes post-completion of pile removal activities. Pre-activity monitoring shall be conducted for 30 minutes to ensure that the shutdown zone is clear of marine mammals, and pile removal activities may commence when observers have declared the shutdown zone clear of marine mammals. In the event of a delay or shutdown of activity resulting from marine mammals in the shutdown zone, animals shall be allowed to remain in the shutdown zone (i.e., must leave of their own volition) and their behavior shall be

monitored and documented. Monitoring shall occur throughout the time required to drive a pile. The shutdown zone must be determined to be clear during periods of good visibility (i.e., the entire shutdown zone and surrounding waters must be visible to the naked eye).

- (g) If a marine mammal approaches or enters the shutdown zone, all pile removal activities at that location shall be halted. If pile removal activities are halted or delayed due to the presence of a marine mammal, the activity may not commence or resume until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 30 minutes have passed without re-detection of the animal.
- (h) Monitoring shall be conducted by qualified PSOs, as described in the Monitoring Plan. Trained observers shall be placed from the best vantage point(s) practicable to monitor for marine mammals and implement shutdown or delay procedures when applicable through communication with the equipment operator.
- (i) WSF shall use soft start techniques recommended by NMFS for vibratory hammer use. Soft start for vibratory drivers requires contractors to initiate sound for fifteen seconds at reduced energy followed by a thirty-second waiting period. This procedure is repeated two additional times. Soft start shall be implemented at the start of each day's pile removal activities and at any time following cessation of pile removal activities for a period of thirty minutes or longer.
- (j) Pile removal activities shall only be conducted during daylight hours.
- (k) All in-water construction will be limited to the period between August 1, 2015 and February 15, 2016 and may resume on August 1, 2016 until the Authorization expires on August 31, 2016 to avoid in-water work when ESA-listed salmonids are most likely to be present.

5. Monitoring

The holder of this Authorization is required to conduct marine mammal monitoring during pile removal activities and to conduct acoustic monitoring of background sound and project activities. Monitoring and reporting shall be conducted in accordance with the Monitoring Plan.

- (a) WSF shall collect sighting data and behavioral responses to pile removal activities for marine mammal species observed in the region of activity during the period of activity. All observers shall be trained in marine mammal identification and behaviors, and shall have no other construction-related tasks while conducting monitoring.
- (b) For all marine mammal monitoring, information shall be recorded as described in the Monitoring Plan.

6. Reporting

The holder of this Authorization is required to:

- (a) Submit a draft report on all monitoring conducted under the IHA within 45 calendar days of the completion of marine mammal and acoustic monitoring, or sixty days prior to the issuance of any subsequent IHA for this project, whichever comes first. A final report shall be prepared and submitted within thirty days following resolution of comments on the draft report from NMFS. This report must contain the informational elements described in the Monitoring Plan, at minimum (see attached), and shall also include:
- (i) Detailed information about any implementation of shutdowns, including the distance of animals to the pile and description of specific actions that ensued and resulting behavior of the animal, if any.
- (b) Reporting injured or dead marine mammals:
- (i) 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 (e.g., ship-strike, gear interaction, and/or entanglement), WSF shall immediately cease all operations and immediately report the incident to the Chief Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by email to *Jolie.Harrison@noaa.gov* and *Robert.pauline@noaa.gov* and the West Coast Regional Stranding Coordinator Brent Norberg (*Brent.Norbert@noaa.gov*). The report must include the following information:
1. Time and date of the incident;
 2. Description of the incident;
 3. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
 4. Description of all marine mammal observations in the 24 hours preceding the incident;
 5. Species identification or description of the animal(s) involved;
 6. Fate of the animal(s); and
 7. Photographs or video footage of the animal(s).

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

- (ii) In the event that WSF 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), WSF will immediately report the incident to the Chief Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or be email to *Jolie.Harrison@noaa.gov* and *Robert.pauline@noaa.gov* and the West Coast Regional Stranding Coordinator Brent Norberg (*Brent.Norbert@noaa.gov*).

The report must include the same information identified in 6(b)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with Navy to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that WSF 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), WSF shall report the incident to the Chief, Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or be email to *Jolie.Harrison@noaa.gov* and *Robert.pauline@noaa.gov* and the West Coast Regional Stranding Coordinator Brent Norberg (*Brent.Norbert@noaa.gov*) within 24 hours of the discovery. WSF shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. WSF can continue its operations under such a case.

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

Parry Cayano

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

AUG 26 2015

Date

Table 1. Authorized Take Numbers, by Species

Species	Marine Mammal Takes
Pacific harbor seal	1,820
California sea lion	840
Steller sea lion	280
Harbor porpoise	1,120
Dall's porpoise	420
Killer whale, transient	48
Killer whale, Southern Resident	15
Gray whale	90
Humpback whale	36