



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

## INCIDENTAL HARASSMENT AUTHORIZATION

The Washington State Department of Transportation (WSDOT) 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 US 101/Chehalis River Bridge-Scour Repair Project in Aberdeen, Washington, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from July 15, 2019 to February 15, 2020.
2. This IHA is valid only for in-water vibratory pile driving and removal activities associated with the US 101/Chehalis River Bridge-Scour Repair Project in Aberdeen, Washington.
3. General Conditions
  - (a) A copy of this IHA must be in the possession of WSDOT, its designees, and work crew personnel operating under the authority of this IHA.
  - (b) The species authorized for taking are the harbor seal (*Phoca vitulina*); California sea lion (*Zalophus californianus*); Steller sea lion (*Eumetopias jubatus*); gray whale (*Eschrichtius robustus*); and harbor porpoise (*Phocoena phocoena*).
  - (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) WSDOT must conduct briefings between construction supervisors, crews, and the marine mammal monitoring team prior to the start of all pile driving and removal activities, and when new personnel join the work, in order to explain responsibilities, communication procedures, marine mammal monitoring protocol, and operational procedures.

### 4. Mitigation Measures

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

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



- (c) Pre-activity marine mammal monitoring must take place from 30 minutes prior to initiation of pile driving and removal. Post-activity marine mammal monitoring must continue through 30 minutes post-completion of pile driving and removal. Pile driving and removal may commence at the end of the 30-minute pre-activity monitoring period, provided observers have determined that the relevant shutdown zone (Table 8) is clear of marine mammals.
- (d) WSDOT must establish and monitor shutdown and Level B harassment zones:
  - i. Shutdown zone sizes for various pile driving activities and marine mammal hearing groups are shown in Table 2.
  - ii. Level B harassment zone sizes are shown in Table 3.
- (e) If a marine mammal approaches or enters the shutdown zone during activities or pre-activity monitoring, all pile driving activities at that location must be halted or delayed, respectively. If pile driving is halted or delayed due to the presence of a marine mammal, the activity may not resume or commence until either the animal has voluntarily left and been visually confirmed beyond the shutdown zone or 15 minutes have passed without re-detection of the animal. Pile driving activities include the time to install or remove a single pile or series of piles, as long as the time elapsed between uses of the pile driving equipment is no more than thirty minutes. See Table 2 (attached) for minimum radial distances required for shutdown zones.
- (f) WSDOT must establish monitoring locations and protocols as described below. Please also refer to the Marine Species Monitoring Plan (Monitoring Plan, attached).
  - i. For vibratory pile driving of sheet piles, a total of four land-based PSOs must monitor the shutdown zone and Level B harassment zone as depicted in the Monitoring Plan.
  - ii. For vibratory pile removal of timber piles and vibratory installation and removal of H piles, a total of three land-based PSOs must monitor the shutdown and Level B harassment zones.
- (g) If a species enters or approaches the Level B harassment zone and that species is either not authorized for take or its authorized number of takes are met, pile driving and removal activities must shut down immediately. Activities must not resume until the animal has been confirmed to have left the area or an observation time period of 15 minutes has elapsed.

5. Monitoring

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

- (a) Monitoring during pile driving and removal must be conducted by NMFS-approved PSOs in a manner consistent with the following:
  - i. Independent PSOs (i.e., not construction personnel) who have no other assigned tasks during monitoring periods must be used.

- ii. At least one PSO must have prior experience working as a marine mammal observer during construction activities. Other PSOs may substitute education (degree in biological science or related field) or training for experience.
- iii. Where a team of three or more PSOs are required, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience working as a marine mammal observer during construction.
- iv. WSDOT must submit PSO CVs for approval by NMFS prior to the onset of pile driving.
- v. WSDOT must ensure that observers have the following additional qualifications:
  - a. Ability to conduct field observations and collect data according to assigned protocols.
  - b. Experience or training in the field identification of marine mammals, including the identification of behaviors.
  - c. Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations.
  - d. Writing skills sufficient to prepare a report of observations including but not limited to the number and species of marine mammals observed; dates and times when in-water construction activities were conducted; dates, times, and reason for implementation of mitigation (or why mitigation was not implemented when required); and marine mammal behavior.
  - e. Ability to communicate orally, by radio or in person, with project personnel to provide real-time information on marine mammals observed in the area as necessary.

6. Reporting

The holder of this Authorization is required to do the following:

- (a) WSDOT must submit a draft report on all marine mammal monitoring conducted under this Authorization within ninety calendar days following the completion of monitoring. A final report must be submitted within thirty days following resolution of comments on the draft report from NMFS. The marine mammal monitoring report must contain, at minimum, the informational elements described below:
  - i. Date and time that monitored activity begins and ends for each day conducted (monitoring period);
  - ii. Construction activities occurring during each daily observation period, including how many and what type of piles driven;
  - iii. Deviation from initial proposal in pile numbers, pile types, average driving times, etc.

- iv. Weather parameters in each monitoring period (e.g., wind speed, percent cloud cover, visibility);
  - v. Water conditions in each monitoring period (e.g., sea state, tide state);
  - vi. For each marine mammal sighting:
    - a. Species, numbers, and, if possible, sex and age class of marine mammals;
    - b. Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity;
    - c. Location and distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;
    - d. Estimated amount of time that the animals remained in the Level B harassment zone;
  - vii. Description of implementation of mitigation measures within each monitoring period (e.g., shutdown or delay);
  - viii. Other human activity in the area within each monitoring period
  - ix. A summary of the following:
    - a. Total number of individuals of each species detected within the Level B harassment zone.
    - b. Total number of individuals of each species detected within the shutdown zone and the average amount of time that they remained in that zone.
    - c. Daily average number of individuals of each species (differentiated by month as appropriate) detected within the Level B Zone, and estimated as taken, if appropriate.
- (b) Reporting injured or dead marine mammals:
- i. In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as serious injury, or mortality, WSDOT must immediately cease the specified activities and report the incident to the Office of Protected Resources, NMFS (301-427-8401), and the West Coast Region Stranding Coordinator, NMFS (206-526-4747). The report must include the following information:
    - 1. Time and date of the incident;
    - 2. Description of the incident;
    - 3. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);

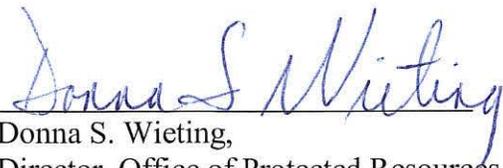
4. Description of all marine mammal observations and active sound source use in the 24 hours preceding the incident;
5. Species identification or description of the animal(s) involved;
6. Fate of the animal(s); and
7. Photographs or video footage of the animal(s).

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

- ii. In the event WSDOT discovers an injured or dead marine mammal, and the lead observer determines that the cause of the injury or death is unknown and the death is relatively recent (e.g., in less than a moderate state of decomposition), WSDOT must immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS. The report must include the same information identified in 6(b)(i) of this IHA. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with WSDOT to determine whether additional mitigation measures or modifications to the activities are appropriate.
- iii. In the event that WSDOT discovers an injured or dead marine mammal, and the lead observer determines that the injury or death is not associated with or related to the activities authorized in the IHA (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), WSDOT must report the incident to the Office of Protected Resources, NMFS, and the West Coast Region Stranding Coordinator, NMFS, within 24 hours of the discovery. WSDOT must provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

7. This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein, or if NMFS determines the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals.
8. Renewals - On a case-by-case basis, NMFS may issue a second one-year IHA without additional notice when 1) another year of identical or nearly identical activities as described in the Specified Activities section is planned or 2) the activities would not be completed by the time the IHA expires and a second IHA would allow for completion of the activities beyond that described in the Dates and Duration section, provided all of the following conditions are met:
  - (a) A request for renewal is received no later than 60 days prior to expiration of the current IHA.

- (b) The request for renewal must include the following:
- (i) An explanation that the activities to be conducted beyond the initial dates either are identical to the previously analyzed activities or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, take estimates, or mitigation and monitoring requirements.
  - (ii) A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.
  - (iii) Upon review of the request for renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures remain the same and appropriate, and the original findings remain valid.

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

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Date

**Table 1. Authorized Take Numbers, by Species**

<b>Species</b>	<b>Authorized Take by Level B Harassment</b>
Harbor seal	214
California sea lion	12
Steller sea lion	12
Gray whale	2
Harbor porpoise	12

**Table 2. Shutdown Zones for Various Pile Driving Activities and Marine Mammal Hearing Groups (Meters)**

<b>Source Type</b>	<b>Low-Frequency Cetaceans</b>	<b>High-Frequency Cetaceans</b>	<b>Phocid Pinnipeds</b>	<b>Otariid Pinnipeds</b>
14-inch timber removal	10	15	10	10
Sheet pile installation	35	55	25	10
H-pile installation and removal	10	10	10	10

**Table 3. Level B Harassment Zones**

<b>Pile type</b>	<b>Level B Harassment Zone Isopleth (meters)</b>
14-inch timber vibratory removal	1,360
Steel sheet vibratory driving	10,000
Steel H-pile vibratory driving and removal	1,000

