



INCIDENTAL HARASSMENT AUTHORIZATION

The Port of Friday Harbor (Port), Friday Harbor, WA, 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 a marina construction project at Friday Harbor, Washington.

1. This Incidental Harassment Authorization (IHA) is valid from the date of issuance through February 15, 2015.
2. This IHA is valid only for pile driving and removal activities associated with reconstruction of the Friday Harbor Marina. Any reference to pile driving in this document is intended to refer to both pile driving and removal.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the Port, 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*), Dall's porpoise (*Phocoenoides dalli*) and the 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) The Port shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, and Port staff prior to the start of all pile driving 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) The Port shall use no more than one vibratory hammer at any given time to remove/install piles.



- (b) During all pile driving, the Port shall implement a minimum shutdown zone of 10 m radius around the pile for marine mammals. If a marine mammal comes within this zone, such operations shall cease.
- (c) The Port shall similarly avoid direct interaction with marine mammals during in-water heavy machinery work other than pile driving that may occur in association with the construction project. 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.
- (d) The Port shall establish monitoring locations as described in the Marine Mammal Monitoring Plan (Monitoring Plan; attached). For pile installation activities, a minimum of one observer shall be assigned to the active pile driving rig in order to monitor the shutdown zone, while at least three additional observers shall be positioned for optimal monitoring of the surrounding waters within the Level B harassment zone. At least two of these shall be vessel-based. During pile removal, a minimum of three observers shall be deployed at the best vantage points to observe the shutdown and disturbance zones. The zone to be monitored is as depicted in Figure 2 of the attached Plan. These observers shall record all observations of marine mammals, as well as behavior and potential behavioral reactions of the animals.
- (e) Monitoring shall take place from 15 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. Pre-activity monitoring shall be conducted for 15 minutes to ensure that the shutdown zone is clear of marine mammals, and pile driving 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).
- (f) If a marine mammal approaches or enters the shutdown zone, all pile driving activities shall be halted. If pile driving is 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 15 minutes have passed without re-detection of the animal.
- (g) The Port shall obtain in-situ marine mammal sightings data and acoustic detection data from the Orca Network and/or Center for Whale Research (or other relevant source) on a daily basis and, if southern resident killer whale sighting data has been reported, on a real-time basis.
- (h) The Port shall delay or cease vibratory pile driving or removal if an animal(s) from any species or stock for which authorization has not been granted approaches or is observed within the Level B harassment zone and would not

resume those activities until the animal(s) has been observed to leave the Level B harassment zone.

- (i) Monitoring shall be conducted by qualified observers, 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.
- (j) The Port shall use soft start techniques recommended by NMFS for vibratory pile driving. The soft start requires contractors to initiate sound from vibratory hammers 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 vibratory pile driving and at any time following cessation of pile driving for a period of 30 minutes or longer.
- (k) Pile driving shall only be conducted during daylight hours.

5. Monitoring

The holder of this Authorization is required to conduct marine mammal monitoring during pile driving activity. Marine mammal monitoring and reporting shall be conducted in accordance with the Monitoring Plan.

- (a) The Port shall collect sighting data and behavioral responses to pile driving 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, the information shall be recorded as described in the Monitoring Plan, to include at minimum:
 - (i) Date and time that monitored activity begins or ends;
 - (ii) Construction activities occurring during each observation period;
 - (iii) Weather parameters (e.g., percent cover, visibility);
 - (iv) Water conditions (e.g., sea state, tide state);
 - (v) Species, numbers, and, if possible, sex and age class of marine mammals;
 - (vi) Description of any observable marine mammal behavior patterns, including bearing and direction of travel and distance from pile driving activity;
 - (vii) Distance from pile driving activities to marine mammals and distance from the marine mammals to the observation point;
 - (viii) Locations of all marine mammal observations; and

- (ix) Other human activity in the area.

6. Reporting

The holder of this Authorization is required to:

- (a) Submit a draft report on all marine mammal monitoring conducted under the IHA within 90 calendar days of the end of the in-water work period. A final report shall be prepared and submitted within 30 days following resolution of comments on the draft report from NMFS. This report must contain the informational elements described under 5(b), at minimum.
- (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 an injury (Level A harassment), serious injury, or mortality, Port shall immediately cease the specified activities and report the incident to the Office of Protected Resources (301-427-8425), NMFS, and the West Coast Regional Stranding Coordinator (206-526-6550), NMFS. The report must include the following information:
 1. Time and date of the incident;
 2. Description of the incident;
 3. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, and visibility);
 4. Description of all marine mammal observations 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 Port to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. Port may not resume their activities until notified by NMFS.

- (ii) In the event that Port 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), Port shall immediately report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional 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 Port to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that Port 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, scavenger damage), Port shall report the incident to the Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. Port shall 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.

PARM GAYARDO

SEP 03 2014

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

Date

Table 1. Authorized take numbers, by species

Species	Authorized Take
Harbor seal (<i>Phoca vitulina</i>)	726
California sea lion (<i>Zalophus californianus</i>)	133
Steller sea lion (<i>Eumetopias jubatus</i>)	162
Dall's porpoise (<i>Phocoenoides dalli</i>)	81
Harbor porpoise (<i>Phocoena phocoena</i>)	376

SEP 03 2014