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 incidentally harass marine mammals, when adhering to the following conditions.

1. This Incidental Harassment Authorization (IHA) is valid from for one year from date of issuance.

2. This IHA is valid only for in-water construction activities associated with the State Route 520 Pontoon Pile Removal Project in Aberdeen, Grays Harbor County, Washington.

3. General Conditions

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

   (b) The species authorized for taking are Pacific harbor seals (Phoca vitulina); California sea lions (Zalophus californianus); Steller sea lions (Eumetopias jubatus); gray whales (Eschrichtius robustus); and harbor porpoises (Phocoena phocoena).

   (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b) and the authorized numbers of takes listed in Table 1.

   (d) The taking by Level A harassment, serious injury, or death of any of the species listed in Table 1 or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA. Any taking exceeding the authorized amounts listed in Table 1 is prohibited and may result in the modification, suspension, or revocation of this IHA.

   (e) WSDOT must ensure that construction supervisors and crews, the monitoring team, and relevant WSDOT staff are briefed prior to the start of all construction activity, and when new personnel join the work, so that responsibilities, communication procedures, monitoring protocols, and operational procedures are clearly understood.

4. Mitigation Measures
The holder of this IHA is required to implement the following mitigation measures:

(a) WSDOT must avoid direct interaction with marine mammals during in-water heavy machinery work other than pile driving that may occur in association with the construction activity. If a marine mammal comes within 10 meters (m) of such activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, as appropriate.

(b) WSDOT is required to employ PSOs per the Monitoring Measures described in section 5 of this IHA.

(c) WSDOT must employ PSOs and establish monitoring locations as described in section 5 of this IHA. WSDOT must monitor harassment zones (Table 2) to the extent possible based on the required number of PSOs, required monitoring locations, and conditions.

(d) Monitoring must take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity.

(e) WSDOT must implement the shutdown zones indicated in Table 3. If a marine mammal is observed entering or within the shutdown zone, pile driving activity must be delayed or halted. Should environmental conditions deteriorate such that marine mammals within the entire shutdown zone would not be visible (e.g., fog, heavy rain), pile driving and removal must be delayed until the PSOs are confident marine mammals within the shutdown zone could be detected.

(f) Pre-start clearance monitoring must be conducted during periods of visibility sufficient for the lead PSO to determine the shutdown zone clear of marine mammals. Pile driving may commence when the determination is made.

(g) If pile driving is delayed or halted 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.

(h) Pile driving activity must be halted upon observation of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met, entering or within the harassment zone.

5. Monitoring Measures
The holder of this IHA is required to abide by the following marine mammal monitoring measures:

(a) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following:

i. PSOs must be independent (i.e., not construction personnel) and have no other assigned tasks during monitoring periods.

ii. At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

iii. Other PSOs may substitute education (degree in biological science or related field) or training for experience.

iv. 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.

v. WSDOT must submit PSO CVs for approval by NMFS prior to beginning any activity subject to this IHA.

vi. WSDOT must establish monitoring locations as described here. For all pile driving activities, a minimum of one observer must be assigned to each active pile driving location to monitor the shutdown zone. PSO locations are at: (1) At the pile driving site or best vantage point practicable to monitor the shutdown zones; and (2) On shore, south of Mid-harbor Flats or best vantage point to monitor the harbor seal haulout site during construction activities. These observers must record all observations of marine mammals, regardless of distance from the pile being driven, as well as additional data indicated in section 6 of this IHA.

6. Reporting

The holder of this IHA is required to:

(a) Submit a draft report on all marine mammal monitoring conducted under the IHA within ninety calendar days of the completion of marine mammal 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.
The marine mammal report must contain the informational elements described in the Monitoring Measures described in section 5 of this IHA, including, but not limited to:

i. Dates and times (begin and end) of all marine mammal monitoring.

ii. Construction activities occurring during each daily observation period, including how many and what type of piles were driven or removed and by what method (i.e., impact or vibratory).

iii. Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance (if less than the harassment zone distance).

iv. The number of marine mammals observed, by species, relative to the pile location and if pile driving or removal was occurring at time of sighting.

v. Age and sex class, if possible, of all marine mammals observed.

vi. PSO locations during marine mammal monitoring.

vii. Distances and bearings of each marine mammal observed to the pile being driven or removed for each sighting (if pile driving or removal was occurring at time of sighting).

viii. Description of any marine mammal behavior patterns during observation, including direction of travel and estimated time spent within the Level A and Level B harassment zones while the source was active.

ix. Number of marine mammals detected within the harassment zones, by species.

x. Detailed information about any implementation of any mitigation triggered (e.g., shutdowns and delays), a description of specific actions that ensued, and resulting behavior of the animal, if any.

xi. Description of attempts to distinguish between the number of individual animals taken and the number of incidences of take, such as ability to track groups or individuals.

xii. Submit all PSO datasheets and/or raw sighting data (in a separate file from the Final Report referenced immediately above).

(c) Reporting Injured or Dead Marine Mammals
In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the IHA-holder shall report the incident to the Office of Protected Resources (OPR) (301-427-8401), NMFS and to the West Coast regional stranding coordinator (562-980-3264) as soon as feasible. If the death or injury was clearly caused by the specified activity, the IHA-holder must immediately cease the specified activities until NMFS is able to review the circumstances of the incident and determine what, if any, additional measures are appropriate to ensure compliance with the terms of the IHA. The IHA-holder must not resume their activities until notified by NMFS.

The report must include the following information:

i. Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);

ii. Species identification (if known) or description of the animal(s) involved;

iii. Condition of the animal(s) (including carcass condition if the animal is dead);

iv. Observed behaviors of the animal(s), if alive;

v. If available, photographs or video footage of the animal(s); and

vi. General circumstances under which the animal was discovered.

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 one-time, one-year Renewal IHA following notice to the public providing an additional 15 days for public comments when (1) up to another year of identical, or nearly identical, activities are planned or (2) the specified activities would not be completed by the time this IHA expires and a Renewal would allow for completion of the activities, provided all of the following conditions are met:

   (a) A request for renewal is received no later than 60 days prior to the needed Renewal IHA effective date (recognizing that the Renewal IHA expiration date cannot extend beyond one year from expiration of the initial IHA).

   (b) The request for renewal must include the following:

      i. An explanation that the activities to be conducted under the requested Renewal IHA are identical to the activities analyzed under the initial IHA, are a subset of the activities, or include changes so minor (e.g., reduction
in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take).

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.

(c) 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 will remain the same and appropriate, and the findings in the initial IHA remain valid.

Table 1. Authorized Amount of Taking, by Level B harassment, by species and stock.

<table>
<thead>
<tr>
<th>Species</th>
<th>Stock</th>
<th>Take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray Whale (<em>Eschrichtius robustus</em>)</td>
<td>Eastern N Pacific</td>
<td>7</td>
</tr>
<tr>
<td>Harbor Porpoise (<em>Phocoena phocoena</em>)</td>
<td>Northern OR/ WA Coast</td>
<td>31</td>
</tr>
<tr>
<td>CA Sea Lion (<em>Zalophus californianus</em>)</td>
<td>U.S.</td>
<td>46</td>
</tr>
<tr>
<td>Steller Sea Lion (<em>Eumetopias jubatus</em>)</td>
<td>Eastern</td>
<td>14</td>
</tr>
<tr>
<td>Pacific Harbor Seal (<em>Phoca vitulina</em>)</td>
<td>Oregon/Washington Coastal</td>
<td>2157</td>
</tr>
</tbody>
</table>
Table 2. Monitoring Zones.

<table>
<thead>
<tr>
<th>Vibratory Pile type</th>
<th>Level B Isopleth (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-inch steel pile</td>
<td>6,310</td>
</tr>
<tr>
<td>24-inch steel pile</td>
<td>6,310</td>
</tr>
<tr>
<td>48-inch steel pile</td>
<td>25,120</td>
</tr>
</tbody>
</table>

Table 3. Shut-down Zones by Marine Mammal Hearing Group, Pile Size, and Pile Driving Method.

<table>
<thead>
<tr>
<th>Pile Type</th>
<th>Low-Frequency Cetaceans</th>
<th>High-Frequency Cetaceans</th>
<th>Phocid Pinnipeds</th>
<th>Otariid Pinnipeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>48-inch steel pile</td>
<td>30</td>
<td>40</td>
<td>20</td>
<td>10</td>
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<tr>
<td>24-inch steel pile</td>
<td>20</td>
<td>30</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>18-inch steel pile</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>