



INCIDENTAL HARASSMENT AUTHORIZATION

The U.S. Navy (Navy) 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 Transit Protection Program Pier and Support Facilities Project at Naval Base Kitsap Bangor in Silverdale, Washington, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from July 16, 2021 to January 15, 2022.
2. This IHA is valid only for construction associated with the Transit Protection Program Pier and Support Facilities Project at Naval Base Kitsap Bangor in Silverdale, Washington.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the Navy, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The species authorized for taking are killer whale (*Orcinus orca*), harbor porpoise (*Phocoena phocoena*), harbor seal (*Phoca vitulina*), California sea lion (*Zalophus californianus*), and Steller sea lion (*Eumetopias jubatus monteriensis*).
 - (c) The taking, by Level A and B harassment, is limited to the species listed in condition 3(b). Table 1 provides the authorized number of takes per species and stock.
 - (d) The taking by serious injury or death of any of the species listed in condition 3(b) of this IHA is prohibited.
 - (e) Any taking of marine mammal species not identified in condition 3(b) is prohibited.
 - (f) The Navy is required to conduct briefings for construction supervisors and crews, the monitoring team, and Navy staff prior to the start of all pile driving activity, and when new personnel join the work, in order to explain responsibilities, communication procedures, the marine mammal monitoring protocol, and operational procedures.
4. Mitigation Measures
The holder of this IHA is required to implement the following mitigation measures:



- (a) For in-water construction, heavy machinery activities other than pile driving, if a marine mammal comes within 10 m, Navy must cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.
- (b) The Navy must establish and implement shutdown zones as indicated in Table 3. Additionally, the Navy must shut down for any cetacean observed within the Level B harassment zone (Table 2).
- (c) The Navy is required to employ PSOs and Monitoring Measures described in section 5 of this IHA.
- (d) Marine mammal monitoring must take place from 30 minutes prior to initiation of pile driving activity through 30 minutes post-completion of pile driving activity. 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 (Table 3), their behavior must be monitored and documented until they leave of their own volition, at which point the activity may begin.
- (e) If a marine mammal is entering or is observed within an established shutdown zone (Table 3), pile driving must be halted or delayed. Pile driving 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 subsequent detections of marine mammals.
- (f) 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 PSO is confident marine mammals within the shutdown zone could be detected.
- (g) The Navy must use soft start techniques when impact pile driving. Soft start requires contractors to provide an initial set of strikes at reduced energy, followed by a thirty-second waiting period, then two subsequent reduced energy strike sets. A soft start must be implemented at the start of each day's impact pile driving and at any time following cessation of impact pile driving for a period of thirty minutes or longer.
- (h) The Navy is required to employ a bubble curtain during all impact pile driving and operate it in a manner consistent with the following performance standards:
 - i. The bubble curtain must distribute air bubbles around 100 percent of the piling perimeter for the full depth of the water column.
 - ii. The lowest bubble ring must be in contact with the mudline for the full circumference of the ring, and the weights attached to the bottom ring

shall ensure 100 percent mudline contact. No parts of the ring or other objects shall prevent full mudline contact.

iii. Air flow to the bubblers must be balanced around the circumference of the pile.

(i) If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized takes are met, is observed approaching or within the Level B harassment zone (Table 2), pile driving and removal activities must shut down immediately using delay and shut-down procedures. Activities must not resume until the animal has been confirmed to have left the area or the observation time period, as indicated in condition 4(e) above, has elapsed.

5. Monitoring Measures

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

- (a) At least two PSOs must monitor for marine mammals during pile driving and removal activities. PSO locations are as follows:
- i. During vibratory pile driving, two PSOs must be stationed on the pier or shore.
 - ii. During impact pile driving, two PSOs must be stationed on the pier, and one additional PSO must observe from a vessel positioned approximately 200m from shore.
- (b) Marine mammal 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 performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
 - 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. Other PSOs may substitute education (degree in biological science or related field) or training for experience.

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 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.
- (b) The marine mammal report must contain the informational elements described in the Marine Mammal Monitoring Plan, dated June 2020, 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. Weather parameters and water conditions during each monitoring period (*e.g.*, wind speed, percent cover, visibility, sea state).
 - 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 individuals of each species (differentiated by month as appropriate) detected within the Level A and Level B harassment zones, and estimates of number of marine mammals taken by Level A and Level B harassment, 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. Estimated percentage of the Level B harassment zone that was not visible.
- xiii. Submit all PSO datasheets and/or raw sighting data (in a separate file from the Final Report referenced immediately above).

(c) Reporting Stranded Marine Mammals

In the event that a live marine mammal is found stranded, whether on shore or in or on any structure or vessel, the following steps shall be taken:

- i. Project personnel who discover the marine mammal shall immediately notify the most appropriate onsite personnel with relevant expertise (*e.g.*, marine mammal observers) as well as the Navy (if non-Navy project personnel initially discover the animal).
- ii. The Navy shall then immediately notify the West Coast Regional Stranding Coordinator, NMFS, and, in consultation with the Stranding Coordinator, shall immediately notify the most appropriate qualified individual (*i.e.*, biologist or veterinarian) to respond to the event.
- iii. In the interim, or in the event that no qualified individual other than onsite marine mammal observers is available to respond to the event, the Navy shall manage the event response and shall take action to prevent any further deterioration of the animal's condition, to the extent possible. Appropriate action may be specific to the event. At minimum, the Navy should provide shade for the animal (if possible), shall not move the animal or cause the animal to move, and shall suspend project activity until the situation is resolved.
- iv. The Navy shall report the incident to the Office of Protected Resources (OPR), NMFS, within 48 hours after discovery.

(d) 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 Hotline (866-767-6114) 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, as described in the Specified Activities section of this notice, is planned or (2) the activities as described in the Specified Activities section of this notice would not be completed by the time the IHA expires and a Renewal would allow for completion of the activities beyond that described in the Dates and Duration section of this notice, 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.

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

Date

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

Species	Stock	Level A Harassment Take	Level B Harassment Take
Killer whale	West Coast Transient	0	12
Harbor porpoise	Washington Inland Waters		1,728
Steller sea lion	Eastern U.S.		320
California sea lion	United States		4,800
Harbor seal	California	20	2,800

Table 2. Level A and Level B Harassment Isopleths

Pile Type/Size and Installation Method	Distance to Level A Harassment Isopleth (m)				Distance to Level B Harassment Isopleth (m)
	MF Cetacean	HF Cetacean	Phocid	Otariid	
36-inch Steel Impact	11	351	158	12	541
36-inch Steel Vibratory	4	64	26	2	11,659

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

	Cetaceans	Phocids	Otariids
All Vibratory Pile Driving	65 m	30 m	10 m
All Impact Pile Driving	355 m ¹	160 m	15 m

NOTE: In addition to these shutdown zones, the Navy will shut down if a cetacean is observed within the Level B harassment zones noted in Table 2.