



INCIDENTAL HARASSMENT AUTHORIZATION

The Alaska Department of Transportation and Public Facilities (ADOT&PF) 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 pile driving, pile removal, and drilling in Tongass Narrows near Ketchikan, Alaska, when adhering to the following terms and conditions.

1. This Incidental Harassment Authorization (IHA) is valid from March 1, 2022 to February 28, 2023.
2. This IHA is valid only for in-water construction activities associated with Phase 2 of the Tongass Narrows Project as described in the *Federal Register* notice on issuance of the final IHAs: ferry berth improvements and construction in Tongass Narrows near Ketchikan, Alaska including Revilla Refurbish Existing Ferry Berth Facility and Gravina Refurbish Existing Ferry Berth Facility.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of ADOT&PF, its designees, work crew personnel, and Protected Species Observers (PSOs) operating under the authority of this IHA.
 - (b) The taking, by Level A harassment and Level B harassment, is limited to the species listed in Table 1. Table 1 provides the authorized number of takes per species and stock.
 - (c) The taking, by serious injury or death of any of the species listed in Table 1 of this IHA is prohibited.
 - (d) The taking, by Level A harassment, Level B harassment, serious injury, or death, of marine mammal species not identified in Table 1 is prohibited.
 - (e) Work must only occur during daylight hours.
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 and removal (e.g., use of barge-mounted excavators, or dredging), if a marine mammal comes within 10 m, ADOT&PF must cease operations and reduce vessel speed to the minimum level required to maintain steerage and safe working conditions.
- (b) ADOT&PF is required to conduct briefings for construction supervisors and crews, the monitoring team (including PSOs), and ADOT&PF 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.
- (c) ADOT&PF is required to establish and monitor shutdown zones (as shown in Table 2) for the presence of marine mammal species.
- (d) Marine mammal monitoring must take place from 30 minutes prior to initiation of pile driving, removal, and drilling activity through 30 minutes post-completion of this activity. Pile driving, removal, and drilling 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 2), animals must be allowed to remain in the shutdown zone (*i.e.*, must leave of their own volition) and their behavior must be monitored and documented.
- (e) If a marine mammal is entering or is observed within an established shutdown zone (Table 2), pile driving, removal and drilling 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 cetaceans or pinnipeds.
- (f) ADOT&PF 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.
 - i. 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.
 - ii. If a marine mammal is present within the Level A harassment zone, soft-start must be delayed until the animal leaves the Level A harassment zone. Soft start must begin only after the MMO has determined, through sighting, that the animal has moved outside the Level A harassment zone.

- iii. If a marine mammal is present in the Level B harassment zone, soft start may begin and a Level B harassment take will be recorded. Soft start up may occur when these species are in the Level B harassment zone, whether they enter the Level B harassment zone from the Level A harassment zone or from outside the Project area.
- (g) In-water installation and removal on the Revilla Island side of the Narrows will be limited to no more than 2 hours and will not coincide with in-water pile installation and removal on Gravina Island.
- (h) 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 monitoring zone (Table 3), 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.
- (i) If waters exceed a sea state that restricts the PSO's ability to make observations within the Level A harassment zones (*e.g.*, excessive wind or fog), pile installation and removal must cease. Pile driving must not be re-initiated until the entire relevant Level A harassment zones are visible.

5. Monitoring Measures

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

- (a) Marine mammal monitoring must be conducted in accordance with the following general measures
 - i. There must be a minimum of two observers at an active driving site to actively observe monitoring and shutdown zones during all pile driving, pile removal, and drilling.
 - ii. PSOs must not perform duties for more than 12 hours in a 24-hour period.
 - iii. The monitoring positions of the observers must have the following characteristics:
 - 1. One PSO must be located at or near the active driving site and must be able to observe the entire shutdown zone under normal conditions.

2. At least one additional PSO must be stationed on land along the Tongass Narrows at the best practicable vantage points to observe the monitoring zones and assist in observing the shutdown zones
- (b) Marine mammal monitoring during pile driving, pile removal, and drilling 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. PSOs other than the lead observer may substitute education (degree in biological science or related field) or training for experience.
 - iii. Where a team of three or more PSOs is 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. ADOT&PF must submit PSO CVs for approval by NMFS prior to the onset of pile installation or removal activities.
- (c) PSOs must have the following additional qualifications:
- i. Ability to conduct field observations and collect data according to assigned protocols.
 - ii. Experience or training in the field identification of marine mammals, including the identification of behaviors.
 - iii. Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations.
 - iv. 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.
 - v. 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 IHA is required to:

- (a) Submit a draft report on all 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 must 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 Marine Mammal Monitoring Plan found in Appendix B of the IHA application, 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, vibratory, or drilling).
 - 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, 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.
 - ix. Number of individuals of each species (differentiated by month as appropriate) detected within the monitoring zone, and estimates of number of marine mammals taken, by species (a correction factor may be applied to total take numbers, as appropriate).
 - x. Detailed information about any implementation of any mitigation triggered (*e.g.*, shutdowns and delays), a description of specific actions that ensued, and resulting change of 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. Takes by Level B harassment must be recorded by PSOs and extrapolated based upon the number of observed takes and the percentage of the Level B harassment zone that was not visible.
- (b) Reporting injured or dead marine mammals:
- i. In the unanticipated event personnel involved in construction activities discover an injured or dead marine mammal, ADOT&PF must report the incident to the NMFS Office of Protected Resources (301-427-8401) and Alaska Region Stranding Coordinator (877-925-7773). The report must include the following information:
 - 1. Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
 - 2. Species identification (if known) or description of the animal(s) involved;
 - 3. Condition of the animal(s) (including carcass condition if the animal is dead);
 - 4. Observed behaviors of the animal(s), if alive;
 - 5. If available, photographs or video footage of the animal(s); and
 - 6. 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-year IHA renewal with an expedited public comment period (15 days) when 1) another year of identical or nearly identical activities 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 allowed for under this IHA, 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.
- (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 remain the same and appropriate, and the original findings remain valid.

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Kimberly Damon-Randall,
Director, Office of Protected Resources
National Marine Fisheries Service

Date

Table 1. Authorized Take Numbers, by Species/Stock.

Species	DPS/Stock	Estimated Number of Exposures to Level B Harassment	Estimated Number of Exposures to Level A Harassment	Total Estimated Exposures (Level A and Level B Harassment)
Steller sea lion	Eastern DPS	450	0	450
Harbor seal	Clarence Strait	162	9	171
Harbor porpoise	Southeast Alaska	30	10	40
Dall's porpoise	Alaska	45	15	60
Pacific white-sided dolphin	North Pacific	92	0	92
Killer whale	West Coast transient Alaska Resident Northern Resident	60	0	60
Humpback whale ^a	Hawaii DPS Mexico DPS	15 1	0 0	15 1
Minke whale	Alaska	3	0	3

Note: DPS = distinct population segment

^a Assumes that 6.1 percent of humpback whales exposed are members of the Mexico DPS (Wade *et al.* 2016).

Table 2. Phase 2 Shutdown Zones.

Activity	Pile Size (inches)	Minutes per Pile or Strikes per Pile	Piles Installed or Removed per Day	Shutdown Distances (m)					
				LF	MF	HF	PW	OW	
Vibratory Installation	30	30 min	1-3	50					
	24	30	1						
Vibratory Removal	16	30 min	1-3						
Drilling Rock Sockets	30	180 min	1-3	70	50	60	50		
Impact Installation	30	50 strikes	3	250	50	250	150	50	
			2	200		200	100		
			1	100		150	100		
	24	50 strikes	3	150		150	100		
			2	100		150	50		
			1	100		100	50		

Table 3. Level B Harassment Monitoring Zones.

Method and Pile Type	Distance to Level B Harassment Isopleth (meters)
Vibratory Hammer (Level B Harassment Isopleth = 120 dB)	
30-inch steel piles	6,400
24-inch steel piles	5,500
16-inch steel piles	5,500
Drilling Rock Sockets (Level B Harassment Isopleth = 120 dB)	
All pile types	12,050
Impact Hammer (Level B Harassment Isopleth = 160 dB)	
30-inch steel piles	2,200
24-inch steel piles	1,000