



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

MAR 30 2017

Julie A. Vance  
Regional Manager  
California Department of Fish and Wildlife – Central Region  
1234 East Shaw Avenue  
Fresno, California 93710

Dear Ms. Vance,

Enclosed is an Incidental Harassment Authorization (IHA) issued to the California Department of Fish and Wildlife – Central Region (CADFW), pursuant to section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*). This Authorization allows for the incidental take, by Level B harassment only, of Pacific harbor seals (*Phoca vitulina richardii*), incidental to the Minhoto-Hester Marsh Restoration Project at Elkhorn Slough, Monterey, CA. The IHA is valid for one year, beginning August 1, 2017.

You are required to comply with the conditions contained in this IHA. In addition, you must cooperate with any federal, state, or local agency monitoring the impacts of your activities, and submit a report to the National Marine Fisheries Service's (NMFS) Office of Protected Resources, within 90 days after completion of the activities authorized herein. The IHA requires monitoring of marine mammals by qualified individuals before, during, and after construction activities, and reporting of marine mammal observations, including species, numbers, and behavioral modifications potentially resulting from this activity.

If you have any questions concerning the IHA or its requirements, please contact, Stephanie Egger or Jolie Harrison, Office of Protected Resources, NMFS, at (301) 427-8401.

Sincerely,

Donna S. Wieting  
Director, Office of Protected Resources

Enclosure



Printed on Recycled Paper





## INCIDENTAL HARASSMENT AUTHORIZATION

The California Department of Fish and Wildlife – Central Region (hereinafter referred to as CDFW), 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 vibratory pile driving and construction activities for tidal marsh restoration within the Minhoto-Hester Marsh in Elkhorn Slough (Monterey, CA) when adhering to the following terms and conditions.

1. This IHA is valid for one year, beginning August 1, 2017.
2. This IHA is valid only for construction activities (inclusive of vibratory pile driving) for tidal marsh restoration associated within the Minhoto-Hester Marsh Restoration Project (Phase 1) in Elkhorn Slough (Monterey, CA).
3. *General Conditions*
  - (a) A copy of this IHA must be in the possession of CDFW, its designees, and work crew personnel operating under the authority of this IHA.
  - (b) The species authorized for taking is the Pacific harbor seal (*Phoca vitulina richardii*).
  - (c) The taking, by Level B harassment only, is limited to the species listed in condition 3(b). See Table 6 (above) for numbers of take authorized.
  - (d) The taking by injury (Level A harassment), serious injury, or death 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 taking of any marine mammal in a manner prohibited under this IHA must be reported immediately to the Office of Protected Resources, NMFS.
  - (f) CDFW shall conduct briefings between construction supervisors and crews, marine mammal monitoring team, and CDFW staff prior to the start of all construction activities for tidal marsh restoration, 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) *Timing Restrictions:* Construction work shall occur only during daylight hours.
- (b) *Construction Activities:* If a seal enters the project area after installation of barriers, CDFW shall use a government official to flush any such seals from the area for purposes of protection/welfare of the animals. In addition, the construction contractor shall begin construction activities gradually each day (e.g. by moving around the project area and starting equipment sequentially).





- (c) *Pupping Season*: If a pup less than one week old (neonate) comes within 20 m of where heavy machinery is working, construction activities in that area will be delayed until the pup has left the area. In the event that a pup less than one week old remains within those 20 m, NMFS will be consulted to determine the appropriate course of action.
- (d) *Vibratory Pile Driving*: An exclusion zone (shutdown zone) of 15 m shall be established during pile driving. Pile extraction or driving shall not commence (or re-commence following a shutdown) until marine mammals are not sighted within the exclusion zone for a 15-minute period. If a marine mammal enters the exclusion zone during sheet pile work, work shall stop until the animal leaves the exclusion zone or until 15 minutes has elapsed without observation of the animal within the zone.

#### 4. *Monitoring*

The holder of this Authorization is required to abide by the following monitoring conditions:

- (a) *Visual Monitoring*  
Qualified Protected Species Observer (PSO) (a NMFS approved biologist) shall be used to detect, document, and minimize impacts to marine mammals. Qualifications for PSOs for visual monitoring include:
  - (i) Visual acuity in both eyes (correction is permissible) sufficient for discernment of harbor seals on land or in the water with ability to estimate target size and distance; use of binoculars may be necessary to correctly identify the target;
  - (ii) Advanced education in biological science or related field (undergraduate degree or higher required);
  - (iii) Experience and ability to conduct field observations and collect data according to assigned protocols (this may include academic experience);
  - (iv) Experience or training in the field identification of marine mammals, including the identification of behaviors;
  - (v) Sufficient training, orientation, or experience with the construction operation to provide for personal safety during observations;
  - (vi) 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 construction activities were conducted; dates and times when construction activities were suspended to avoid potential incidental injury from construction sound or visual disturbance of marine mammals observed; and marine mammal behavior; and
  - (vii) 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.

(b) *PSO Monitoring and Data Collection*

Monitoring shall be conducted before, during, and after construction activities (as described below). In addition, PSOs shall record all incidents of marine mammal occurrence, regardless of distance from activity, and shall document any behavioral reactions in concert with distance from construction activities. PSOs shall be placed at the best vantage point(s) practicable to monitor for marine mammals.

The PSO shall also conduct biological resources awareness training for construction personnel. The awareness training will be provided to brief construction personnel on identification of marine mammals (including neonates) and the need to avoid and minimize impacts to marine mammals. If new construction personnel are added to the project, the contractor shall ensure that the personnel receive the mandatory training before starting work. The PSO will have authority to stop construction if marine mammals appear distressed (evasive maneuvers, rapid breathing, inability to flush) or in danger of injury. Monitoring requirements also include:

- (i) The holder of this Authorization must designate at least one biologically-trained, on-site individual(s), approved in advance by NMFS, to monitor marine mammal species. The PSO will be trained in marine mammal identification and behaviors and are required to have no other construction-related tasks while conducting monitoring.
- (ii) PSOs shall be provided with the equipment necessary to effectively monitor for marine mammals in order to record species, behaviors, and responses to construction activities.
- (iii) *Pre-activity Monitoring:* At least 30 minutes prior to the start of all construction activities, the PSO(s) must conduct observations on the number, type(s), location(s), and behavior(s) of marine mammals.
- (iv) *Monitoring during Construction Activity:* To document disturbance and possible incidental take during construction activities, the monitoring protocols shall be implemented at *all times* when work is occurring either 1) in-water, 2) north of a line starting at 36° 48'38.91 N 121° 45'08.03 W and ending 36° 48'38.91 N 121° 45'27.11 W (see Figure 1 of the monitoring plan in the application), or 3) within 30.5 m (100 feet) of tidal waters. When work is occurring in other areas, the monitoring protocols shall be implemented for the first three days of construction and anytime there is a significant change in activities or location of construction activities within the project area. If disturbance is noted at any time, then monitoring shall continue until there are three successive days of no disturbance. If there is a gap in construction activities of more than one week the monitoring protocols shall again be implemented for the first three days that construction resumes.

Data collection during marine mammal monitoring shall consist of hourly counts of all marine mammals by species, number, sex, age class, a



description of behavior (if possible), location, direction of movement, type of construction that is occurring, time construction activities starts and ends, any noise or visual disturbance, and time of the observation. When responses are observed, the type of take (*i.e.*, alert and flush, movement of more than one m, or change in direction of movement) and the assumed cause (whether related to construction activities or not) shall be noted. Environmental conditions such as weather, visibility, temperature, tide level, current, and sea state shall also be recorded. A written log of dates and times of monitoring activity will be kept. The log shall report the following information:

- Time of PSO arrival on site;
- Time of the commencement of construction activities;
- Distances to all marine mammals relative to the disturbance;
- Observations, notes on marine mammal behavior during construction activities, as described above, and on the number and distribution observed in the project vicinity;
- For observations of all other marine mammals (if observed) the time and duration of each animal's presence in the project vicinity; the number of animals observed; the behavior of each animal, including any response to construction activities;
- Time of the cessation of construction activities;
- Time of PSO departure from site; and
- An estimate of the number (by species) of marine mammals that are known to have been disturbed by construction activities (based on visual observation) with a discussion of any specific behaviors those individuals exhibited. Disturbance must be recorded according to NMFS' three-point scale (see Table 2).

Individuals implementing the monitoring protocol will assess its effectiveness using an adaptive approach. PSOs will use their best professional judgment throughout implementation and seek improvements to these methods when deemed appropriate. Any modifications to protocol will be coordinated between NMFS and the CADFW.

- (v) *Post-activity Monitoring*: At least 30 minutes following the cessation of all construction activities, the PSO(s) must conduct observations on the number, type(s), location(s), and behavior(s) of marine mammals.

## 5. Reporting

- (a) The CADFW shall submit a draft report to NMFS within 90 days of the completion of marine mammal monitoring, or sixty days prior to the issuance of any subsequent IHA for this project (if required), whichever comes first. The report shall include marine mammal observations pre-activity, during-activity, and post-activity of construction, and shall also provide descriptions of any

behavioral responses by marine mammals due to disturbance from construction activities and a complete description of total take estimate based on the number of marine mammals observed during the course of construction. If comments are received from the NMFS Office of Protected Resources on the draft report, a final report shall be submitted to NMFS within 30 days thereafter following resolution of comments on the draft report from NMFS. If no comments are received from NMFS, the draft report will be considered to be the final report. This report must contain the informational elements described above and in the monitoring plan of the application and at minimum shall also include:

- (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, CADFW shall immediately cease the specified activities and report the incident to NMFS' Office of Protected Resources at (301) 427-8401 and the West Coast Regional Stranding Coordinator at (562) 980-3230. 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, tidal conditions, cloud cover, and visibility);
  4. Description of all marine mammal observations and active sound
  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).

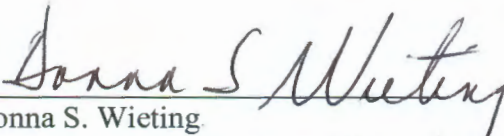
Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with CADFW to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. CADFW may not resume their activities until notified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

- (ii) In the event that CADFW discovers an injured or dead marine mammal, and the lead PSO 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), CADFW shall immediately report the incident to the NMFS' Office of Protected Resources at (301) 427-8401 and the West Coast Regional Stranding Coordinator at (562) 980-3230.

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 the CADFW to determine whether additional mitigation measures or modifications to the activities are appropriate.

- (iii) In the event that the CADFW discovers an injured or dead marine mammal, and the lead PSO 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), the CADFW shall report the incident to NMFS' Office of Protected Resources at (301) 427-8401 and the West Coast Regional Stranding Coordinator at (562) 980-3230 within 24 hours of the discovery. CADFW shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

6. 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.

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

MAR 30 2017

\_\_\_\_\_  
Date



**Table 1. Authorized take numbers, by species**

Species	Authorized Take
Harbor seal ( <i>Phoca vitulina</i> )	250 seals, 1,000 instance of possible Level B harassment for four days during pile installation
Harbor seal ( <i>Phoca vitulina</i> )	50 seals, 6,600 instances of possible Level B harassment for 132 days during construction

**Table 2. Seal response to disturbance**

Level	Type of response	Definition
1	Alert	Seal head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in a u-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length. Alerts will be recorded, but not counted as a 'take'.
2	Movement	Movements away from the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats, or if already moving a change of direction of greater than 90 degrees. <b>These movements will be recorded and counted as a 'take'.</b>
3	Flush	<b>All retreats (flushes) to the water. Flushing into the water will be recorded and counted as a 'take'.</b>