



**Billing Code: 4333-15**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**[FWS-R8-ES-2016-N187; FXES111608M0000]**

**Marine Mammals; Incidental Take during Specified Activities; Proposed Incidental Harassment Authorization**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of receipt of application and proposed incidental harassment authorization; request for comments.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), have received an application from the California Department of Fish and Wildlife, Central Region, for authorization to take small numbers of marine mammals by harassment incidental to construction activities as part of a tidal marsh restoration project within the Minhoto-Hester Marsh in Elkhorn Slough, Monterey County, California. In accordance with provisions of the Marine Mammal Protection Act of 1972, as amended, we request comments on our proposed authorization for the applicant to take incidentally, by harassment, small numbers of southern sea otters (*Enhydra lutris nereis*) over

the course of approximately 11 months beginning between January 2017 and June 2017. We anticipate no take by injury or death and include none in this proposed authorization, which would be for take by harassment only.

**DATES:** Comments and information must be received by [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**].

**ADDRESSES:** *Comment submission:* You may submit comments by any one of the following methods:

1. *U.S. mail or hand-delivery:* Steve Henry, Field Supervisor, Ventura Fish and Wildlife Office, 2493 Portola Road, Suite B, Ventura, CA 93003.

2. *Fax:* 805-644-3958, attention to Steve Henry, Field Supervisor.

3. *Electronic mail (email):* R8\_SSO-IHA\_Comment@fws.gov. Please include your name and U.S. mail address in your message.

*Document availability:* Electronic copies of the incidental harassment authorization request, the Marine Mammal Monitoring Plan, and other supporting materials, such as the list of references used in this notice, may be obtained by writing to the address specified above, telephoning the contact listed in **FOR FURTHER INFORMATION CONTACT**, or visiting the Internet at <http://www.fws.gov/ventura/endangered/species/info/sso.html>. Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned U.S. mail address.

**FOR FURTHER INFORMATION CONTACT:** Lilian Carswell, Southern Sea Otter Recovery & Marine Conservation Coordinator, (805) 612–2793, or by email at Lilian\_Carswell@fws.gov.

**SUPPLEMENTARY INFORMATION:**

**Background**

Sections 101(a)(5)(A) and (D) of the Marine Mammal Protection Act of 1972, as amended, (MMPA; 16 U.S.C. 1371 (a)(5)(A) and (D)), authorize the Secretary of the Interior to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region, provided that we make certain findings and either issue regulations or, if the taking is limited to harassment, provide a notice of a proposed authorization to the public for review and comment.

We may grant authorization to incidentally take marine mammals if we find that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses. As part of the authorization process, we prescribe permissible methods of taking and other means of effecting the least practicable impact on the species or stock and its habitat, and requirements pertaining to the monitoring and reporting of such takings.

The term “take,” as defined by the MMPA, means to harass, hunt, capture, or kill, or to attempt to harass, hunt, capture, or kill, any marine mammal. Harassment, as defined by the MMPA, means “any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [the MMPA calls this Level A harassment],

or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [the MMPA calls this Level B harassment].”

The terms “negligible impact,” “small numbers,” and “unmitigable adverse impact” are defined in title 50 of the Code of Federal Regulations at 50 CFR 18.27, the Service’s regulations governing take of small numbers of marine mammals incidental to specified activities.

“Negligible impact” is defined as “an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.” The term “small numbers” is also defined in the regulations as “a portion of a marine mammal species or stock whose taking would have a negligible impact on that species or stock.” However, we do not rely on that definition here, as it conflates the terms “small numbers” and “negligible impact,” which we recognize as two separate and distinct requirements. Instead, in our small numbers determination, we evaluate whether the number of marine mammals likely to be taken is small relative to the size of the overall population. “Unmitigable adverse impact” is defined as “an impact resulting from the specified activity (1) that is likely to reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs by (i) causing the marine mammals to abandon or avoid hunting areas, (ii) directly displacing subsistence users, or (iii) placing physical barriers between the marine mammals and the subsistence hunters; and (2) that cannot be sufficiently mitigated by other measures to increase the availability of marine mammals to allow subsistence needs to be met.” The subsistence provision applies to northern sea otters (*Enhydra lutris kenyoni*) in Alaska but not to southern sea otters.

## **Summary of Request**

On May 23, 2016, we received an application from the California Department of Fish and Wildlife, Central Region (CDFW), for authorization to take southern sea otters incidental to construction activities associated with a 47-acre tidal marsh restoration project within the Minhoto-Hester Marsh in Elkhorn Slough, Monterey County, California. The project would reduce tidal prism in Elkhorn Slough, reducing the potential for ongoing tidal scour and associated marsh loss. It would also improve marsh sustainability with sea level rise, as the restored marsh would be higher in the tidal frame and further from the drowning threshold, and marsh vegetation in the restored areas would accrete organic material that would help the restored marsh plain rise with sea level. The full Elkhorn Slough Tidal Marsh Restoration Project includes the anticipated restoration of 147 acres, but future phases are not part of this application because they would not likely occur for several years. If any future phase of the project would result in harassment of southern sea otters, another IHA would have to be requested and received prior to its implementation.

A detailed description of the proposed project is contained in the incidental harassment authorization request submitted to us by CDFW (ESA/ESNERR 2016). CDFW submitted revised versions of the application on July 26, 2016, August 24, 2016, August 29, 2016, and September 6, 2016. A final version, submitted on September 15, 2016, was determined to be adequate and complete. Work would begin between January 2017 and June 2017 and require approximately 11 months to complete. This period includes buffers for adverse weather and other conditions when work is not possible. Construction activities are expected to produce noise and visual disturbance that have the potential to result in behavioral harassment of southern sea

otters. We are proposing to authorize take, by Level B harassment only, of southern sea otters as a result of the specified activity.

### **Description of the Activity**

The proposed project would restore approximately 47 acres of tidal marsh within the Minhoto-Hester Marsh area and additional tidal marsh, upland ecotone, and native grassland in a buffer area, intended to absorb upland sediment and contaminants, between the remnant marsh and agricultural fields. Approximately 170,000 cubic yards of fill would be required to raise the marsh plain an average height of 2.4 feet, or 1.9 feet after 1 year of soil consolidation. The entire remnant marsh plain would be raised to an elevation that would allow emergent wetland vegetation to reestablish naturally and persist.

The buffer area would be graded to increase marsh area and to create a gently sloping ecotone band along the edge of the restored marsh. Excavation would widen the existing marsh by up to 150 feet and create a band of gentle slope on the hillside, fostering creation of a wider ecotone habitat. A 35-acre portion of the buffer area would be restored to native-dominated perennial grassland. A weed-resistant border of rhizomatous perennial plants would be planted between the grassland and ecotone. The remaining 6-acre portion of the buffer area would be used as a stockpile location for future restoration phases and would be revegetated with annual barley until future phases were complete, at which time it would be restored to native-dominated perennial grassland.

Remnant historic channels onsite would generally be left in place or filled and re-excavated in the same place. Smaller channels would be filled as needed for marsh access. As much of the existing tidal channel network would be maintained as feasible, and the post-project

channel alignments would be similar to those under existing conditions. The density of channels (length of channel per acre of marsh) after restoration would be comparable to the density in natural reference marshes.

Low levees (less than 0.5 feet above the marsh plain) composed of fill material would be constructed along the larger channels to simulate natural channel levees. The project would recreate natural levee features along the sides of the main channel into the Minhoto-Hester area. Fill would be placed as close to the edge of the channel as possible to simulate the form and function of a natural channel bank. Borrow ditches that date from the times of historical wetland reclamation in these areas would be blocked or filled completely if fill is available after raising the marsh plain. Blocking borrow ditches would route more flow through the natural channels and slightly increase hydraulic resistance, which may achieve benefits from reducing tidal prism and associated scour in the Elkhorn Slough system.

Construction sequencing would begin with water management and/or turbidity control measures constructed around the work areas prior to placing material on the marsh. Work areas on the remnant marsh plain would for the most part be isolated from the tides and dewatered to allow construction to occur in non-tidal conditions. Water control structures such as temporary berms would be utilized to isolate the fill placement area during the construction period. Existing berms would be used where possible. It is likely that the mouth of the restoration area could be closed with an earthen dam or an inflatable dam; however, a sheet pile wall at the mouth of the restoration area could be installed using vibratory hammering if the earthen and inflatable dam options proved to be infeasible. Tidal channels into work areas would be blocked. The isolated work areas would be drained using a combination of gravity and pumps. Water levels within the blocked areas would be managed to keep them mostly free of water (with some ponded areas

remaining) to allow fill placement at all stages of the tides. Blocking of tidal channels would occur at low tide. Upon completion of sediment placement, the berms would be lowered to the target marsh elevation, reintroducing tidal inundation. Any blocked tidal channels would be re-excavated. After fill placement on the marsh, any temporary features, such as water management berms, sheet piles, and culverts, would be removed.

All material needed for the current phase of the project is onsite. Additional material may be delivered to the restoration areas by trucks if it becomes available. Construction crews and equipment would access the existing stockpile area and Minhoto Marsh from Dolan Road via existing roadways that were used for delivery of the existing sediment stockpile, located alongside existing agricultural fields. The Hester Marsh staging area may be accessed from Via Tanques Road.

Construction equipment would include haul trucks, heavy earthmoving equipment (such as bulldozers, backhoes, and loaders), and excavators to transport dry material out onto the marsh. A conveyor system could be used to transport material from a stockpile out to the marsh in lieu of bulldozers. In such cases, timber matting would be temporarily placed on the marsh to provide a stable footing for the conveyors. A mobile radial stacker at the end of the conveyor belt would be rotated to spread the material.

a. Timing of Activity

Construction is anticipated to require approximately 11 months. The 11-month window would include 132 days of construction activity and (if needed) 4 days of vibratory pile driving, totaling 136 days of project activity. The 11-month window includes the time required for ecotone and grassland restoration work. Most work on the marsh plane would likely be completed within 6 to 8 months. The length of the construction period is based on the

assumption that construction contractors would work between the hours of 5:00 a.m. to 6:00 p.m., Monday through Friday. However, some construction activity could also be required during these times on Saturdays. The proposed IHA would be valid for 1 year from the date of issuance, with project activities beginning between January 2017 and June 2017.

b. Geographic Location of Activity

The proposed project is located in the Elkhorn Slough estuary, a network of intertidal marshes, mudflats, and subtidal channels 90 miles south of San Francisco and 20 miles north of Monterey (see Figure 1-1 of ESA/ESNERR 2016). The Minhoto-Hester Marsh, where the proposed restoration work would occur, is a low-lying area within Elkhorn Slough consisting of subsided pickleweed (*Salicornia pacifica*) marsh, intertidal mudflats, tidal channels, and remnant levees. The project area is on land owned and managed by CDFW as part of the Elkhorn Slough National Estuarine Research Reserve (ESNERR) (see Figure 1-2 of ESA/ESNERR 2016). One Marine Protected Area (MPA), a State Marine Reserve, partially overlaps with the project area. Two additional MPAs are located within 1 mile of the project area. The Minhoto-Hester Marsh has multiple cross-levees and both natural and dredged channels, with a major dredged channel (exceeding 100 feet in width in some locations) that runs north to south through the remnant marsh.

**Description of Marine Mammals in the Area of the Activity**

Southern sea otters and Pacific harbor seals (*Phoca vitulina richardii*) are present in or near the project site. Pacific harbor seals are under the jurisdiction of the National Marine Fisheries Service (NMFS) and are considered under a separate proposed IHA notice. Therefore,

we do not address them further here. The only marine mammal species under the jurisdiction of the Service that occurs in the proposed project area is the southern sea otter.

Southern sea otters are listed as threatened under the Endangered Species Act of 1973, as amended (ESA) (42 FR 2965; January 14, 1977), and, because of their threatened status, are considered “depleted” under the MMPA. The State of California also recognizes the sea otter as a fully protected mammal (Fish and Game Code section 4700) and as a protected marine mammal (Fish and Game Code section 4500). All members of the sea otter population in California are descendants of a small group that survived the fur trade and persisted near Big Sur, California. Historically ranging from at least as far north as Oregon (Valentine et al. 2008) to Punta Abreojos, Baja California, Mexico, in the south, sea otters currently occur in only two areas of California. The mainland population ranges from San Mateo County to Santa Barbara County, and a translocated population exists at San Nicolas Island, Ventura County. The most recent (2016) California-wide index of abundance is 3,272 individuals ([www.werc.usgs.gov/seaottercount](http://www.werc.usgs.gov/seaottercount)). Additional general information on status and trends of the southern sea otter may be found in the stock assessment report, available at <http://www.fws.gov/ventura/endangered/species/info/sso.html>.

Sea otters occur in Elkhorn Slough year round. As many as 150 sea otters (mostly male) raft together in the harbor at the mouth of Elkhorn Slough, and more than 50 females and pups, and a few territorial males, utilize protected tidal creeks and adjacent waters further up the slough (Scoles et al. 2012). Sea otters occur in the harbor, in tidal channels, and where eelgrass (*Zostera marina*) is present. Seal Bend, which is located approximately 0.8 river miles west of the proposed project area, is an important area for sea otter activity due to the large patch of

eelgrass present there. When not disturbed, sea otters also frequently come ashore to rest, interact, and groom (Scoles et al. 2012).

Sea otters use areas within the project footprint minimally (ESA/ESNERR 2016; USGS, Monterey Bay Aquarium, and ESNERR unpublished data). A maximum of two sea otters at any one time were observed within the project footprint during pre-project monitoring conducted in 2013 (Beck 2014). These animals were observed resting in water in area M3 of Minhoto Marsh (see Figure 4-2 of ESA/ESNERR 2016) when tidal heights were approximately 4 feet or higher. The maximum length of time a sea otter was observed in M3 during any monitoring session was 1.5 hours (Beck 2014).

Up to 50 southern sea otters may be present in the area in and around Minhoto Marsh, Parsons Slough, Yampah Marsh, and the portion of Elkhorn Slough Channel that could be exposed to construction-related noise or disturbance (ESA/ESNERR 2016). Three main sea otter resting locations occur in these areas: one in the Parsons Slough Complex near the Avila Property and two near Yampah Island, southwest of the Union Pacific Railroad Bridge (see Figure 4-3 of ESA/ESNERR 2016; note that one marker is used to represent the two Yampah Island resting areas, which are located immediately to the west and east of its location on the map). Each of these areas consists of a territorial male and females with or without pups. Up to 35 sea otters were observed within the Parsons Slough Complex and Yampah Marsh during monitoring for an earlier project (ESNERR 2011). The closest area of concentrated sea otter activity to the project footprint is in Yampah Marsh, approximately 800 feet to the northeast (ESA/ESNERR 2016). The Yampah Marsh area is used heavily by females with and without pups for resting, hauling out, grooming, and (for females with pups) nursing (ESA 2016; USGS, Monterey Bay Aquarium, and ESNERR unpublished data).

## **Potential Impacts of the Proposed Action on Sea Otters**

In this section we provide a qualitative discussion of the potential impacts of the proposed project. The “Estimated Take by Incidental Harassment” section later in this document includes a quantitative analysis of the number of individuals that may be taken by Level B harassment as a result of this activity. Sea otters that have been observed to use Minhoto Marsh would be prevented from accessing the area and would be displaced to other areas of Elkhorn Slough for the duration of the project. Sea otters using the marsh areas adjacent to the project site for resting and foraging would be exposed to construction noise and activity, which could deter them from using these areas and displace them to adjacent areas of Elkhorn Slough. If sheet pile (rather than an earthen dam or inflatable dam) is required to isolate the construction area from tidal waters, vibratory hammering would increase ambient noise levels at the site for 4 days. Noise generated by vibratory pile driving could cause sea otters that forage or rest in the portion of the main channel adjacent to the restoration area to relocate temporarily to nearby areas. Behavioral changes resulting from disturbance could include startle responses, the interruption of resting behaviors (while in water or hauled out on pickleweed), and changes in foraging patterns. Impacts of the proposed project are limited to behavioral disturbance that may reach the threshold of Level B harassment. These impacts could result from airborne noise and visual disturbance caused by the presence of construction equipment and workers over a period of 11 months and (if sheet pile installation is required) from underwater noise caused by vibratory pile driving over a 4-day period.

Relatively little is known regarding the effects of noise on sea otters, but they have not been reported to be particularly sensitive to noise disturbance, especially in comparison to other

marine mammals (Riedman 1983, 1984). Many marine mammals depend on acoustic cues for vital biological functions, such as orientation, communication, locating prey, and avoiding predators. However, sea otters are not known to use acoustic information to orient or to locate prey, nor are they known to communicate underwater. Ghoul and Reichmuth (2014) obtained aerial and underwater audiograms for a captive adult male sea otter and evaluated his hearing in the presence of noise. In air, the sea otter's hearing was similar to that of a sea lion (*Zalophus californianus*) but less sensitive to high-frequency (greater than 22 kHz) and low-frequency (less than 2 kHz) sounds than terrestrial mustelids. Underwater, the sea otter's hearing was less sensitive than that of sea lions and other pinnipeds, particularly at frequencies below 1 kHz. Critical ratios were more than 10 dB above those measured in pinnipeds, suggesting that sea otters have a relatively poor capacity to detect acoustic signals in noise.

Observed responses of wild sea otters to disturbance are highly variable, probably reflecting the level of noise and activity to which they have been exposed and become acclimated over time and the particular location and social or behavioral state of that individual (G. Bentall pers. comm. 2010). Sea otters appeared to be relatively undisturbed by pile driving activities in Elkhorn Slough during the construction of the Parsons Slough Sill (adjacent to the Minoto-Hester Marsh), with many showing no response to pile driving and generally reacting more strongly to passing vessels associated with construction than to the sounds of machinery (ESNERR 2011). Sea otters in Elkhorn Slough are likely acclimated to loud noises, as they occupy an area near an active railroad track, which produces in-air sound levels comparable to those produced by the vibratory driving of H piles (ESNERR 2011). Approximately 15–20 trains pass through Elkhorn Slough each day within 400 feet of the easternmost portion of the project

area (Vinnedge Environmental Consulting 2010). A vehicle dismantling and recycling yard is located approximately 300 feet from the project area.

The proposed construction activity may generate airborne noise above ambient levels or create a visual disturbance (during typical construction hours/workdays) for a period of 11 months. However, only work in the northern and eastern portions of Minhoto Marsh would be expected to disturb sea otters due to their proximity to the adjacent areas used by sea otters. Work in these portions of the marsh would likely be accomplished within approximately 6 months (132 construction days). Airborne noise produced by heavy earth-moving equipment such as backhoes and front-end loaders may produce sound levels of 80–90 dB re 20 $\mu$ Pa at 50 feet (Federal Highway Administration 2015). Vibratory driving of steel sheet piles, which may occur during 4 of the 136 total days of construction, is expected to produce maximum airborne sound levels of 97 dBA re 20 $\mu$ Pa at 33 feet and 90 dBA re 20 $\mu$ Pa at 98 feet (where dBA refers to dB with A-weighting designed to match the average frequency response of human hearing, which enables comparison of the intensity of noises with different frequency characteristics) (ESNERR 2011). Vibratory driving of sheet piles would generate underwater noise to which sea otters in the vicinity would be exposed while diving or performing other behaviors that cause immersion of the ears. However, because of acoustic shadowing due to the winding configuration of Elkhorn Slough, underwater sound transmission would be relatively limited. The likely extent of transmission of sound exceeding 120 dB re 1  $\mu$ Pa is pictured in Figure 6-4 of ESA/ESNERR (2016).

NMFS employs acoustic exposure criteria to define Level A harassment (injury) and Level B harassment (disturbance) resulting from sound for the marine mammal species under its jurisdiction. For underwater non-impulsive noise (which includes vibratory pile driving and

removal), NMFS uses 219 dB re 1  $\mu$ Pa (cumulative 24-hour sound exposure level) as the threshold for Level A harassment of otariid pinnipeds (e.g., sea lions) (NMFS 2016) and 120 dB re 1  $\mu$ Pa (received level) as the threshold for Level B harassment. For airborne noise, NMFS uses 100 dB re 20  $\mu$ Pa (received level) as a guideline, but not formal threshold, for the onset of Level B harassment for pinnipeds other than harbor seals (79 FR 13991; March 12, 2014). NMFS does not have a guideline for the onset of Level A harassment of pinnipeds by airborne noise (A. Scholik-Schlomer, Office of Protected Resources, Marine Mammal and Sea Turtle Conservation Division, pers. comm. 2014). However, Southall et al. (2007) propose an injury criterion for sea lions exposed to airborne noise of 172.5 dB re 20  $\mu$ Pa.

In the absence of sufficient data on which to base noise exposure thresholds specific to sea otters, but in light of experimental evidence suggesting that the hearing sensitivities of sea lions and sea otters are generally comparable (although, as noted above, sea otter hearing appears to be less sensitive than sea lion hearing underwater), we use the thresholds, guidelines, and criteria applicable to sea lions as proxies. With regard to underwater noise, we use the thresholds adopted by NMFS for sea lions to evaluate whether noise exposure levels would constitute Level A or Level B harassment of sea otters. With regard to airborne noise, we use the guideline that NMFS uses for pinnipeds other than harbor seals to evaluate whether anticipated exposure levels resulting from this project would constitute Level B harassment of sea otters and the injury criterion proposed in Southall et al. (2007) for sea lions to evaluate whether the anticipated airborne noise exposures would constitute Level A harassment. Specifically, we use 219 dB re 1  $\mu$ Pa as the threshold for Level A harassment underwater and 120 dB re 1  $\mu$ Pa (for non-impulse sources) as the threshold for Level B harassment underwater. Similarly, we adopt for sea otters the 100 dB re 20  $\mu$ Pa guideline that NMFS uses for in-air Level B harassment of pinnipeds other

than harbor seals. We use the Southall et al. (2007) criterion of 172.5 dB re 20  $\mu$ Pa for sea lions to approximate the airborne noise levels that may cause injury to sea otters. Given that sea otters are not known to use sound to communicate underwater, to orient, or to locate prey, and given sea otters' decreased sensitivity to underwater noise relative to that of sea lions, we acknowledge that these thresholds are likely highly conservative. As additional behavioral or other data on sea otter responses to sound become available, we may determine that one or more of these thresholds are not applicable to sea otters.

### **Potential Effects of the Proposed Action on Sea Otter Habitat**

Habitat within the project footprint would be inaccessible to sea otters for the duration of construction. However, these impacts would be minimal, as past surveys documented a maximum of two sea otters using this area. Construction activity would result in a slight increased risk of accidental water contamination from equipment refueling, fluid leakage, or maintenance activities within or near water bodies. Leaks or spills of petroleum hydrocarbon products found in construction equipment could have adverse effects on sea otters by contaminating their fur (interfering with thermoregulation) and through ingestion during grooming. Vibratory pile driving (if required by the project) would not be expected to alter the availability of prey species to sea otters in the waters or marshlands adjacent to the project site because these species are largely sessile benthic invertebrates. The proposed action would permanently alter habitat within the footprint of the construction area, but the restoration of salt marsh would benefit sea otters over the longer term by providing additional high-quality habitat within Elkhorn Slough for hauling out and foraging.

## **Potential Impacts on Subsistence Needs**

The subsistence provision of the MMPA does not apply.

## **Mitigation Measures**

CDFW has proposed the following measures to prevent Level A harassment (injury) and to reduce the extent of potential effects from Level B harassment (disturbance) to marine mammals.

1. A Service- and NMFS-approved biologist would conduct mandatory biological resources awareness training for construction personnel. The awareness training would be provided to all construction personnel to brief them on the need to avoid effects on marine mammals. If new construction personnel are added to the project, the contractor would ensure that the personnel receive the mandatory training before starting work.

2. A biological monitor approved by the Service and NMFS would monitor for marine mammal disturbance. Monitoring would occur at all times when work is occurring: (a) in water, (b) 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, or (c) within 100 feet of tidal waters. When work is occurring in other areas, monitoring would be implemented for at least the first 3 days of construction. Monitoring would continue until there are 3 successive days of no observed disturbance, at which point monitoring would be suspended. Monitoring would resume when there is a significant change in activities or location of activities within the project area or if there is a gap in construction activities of more than 1 week. In these cases, monitoring would again be implemented for at least the first 3 days of construction and would not be suspended until there are 3 successive days of no observed disturbance. The biological monitor would have the authority to stop project activities if marine

mammals approach or enter the exclusion zone. Biological monitoring would begin 0.5-hour before work begins and will continue until 0.5-hour after work is completed each day. Work would commence only with approval of the biological monitor to ensure that no marine mammals are present in the exclusion zone.

3. To reduce the risk of potentially startling marine mammals with a sudden intensive sound, the construction contractor would begin construction activities gradually each day by moving around the project area and starting tractors one at a time.

4. Biological monitors would have authority to stop construction at any time for the safety of any marine mammals.

5. In-water construction work would occur only during daylight hours when visual monitoring of marine mammals can be implemented. No in-water work would be conducted at night.

6. If sheet piles are used to isolate construction activities from tidal action, all piles would be installed using a vibratory pile driver, and an exclusion zone would be implemented. Because the area within which underwater sound pressure levels are expected to reach or exceed 190 dB re 1  $\mu$ Pa is less than a foot, the radius of the exclusion zone would be set at a minimum of 49 feet to prevent the injury of marine mammals from machinery. Pile extraction or driving would 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 would stop until the animal leaves the exclusion zone.

7. If marine mammals are present within the work area, they would be allowed to leave on their own volition. If they are not leaving the work area on their own, coordination with

NMFS or the Service (as appropriate) would occur to ensure a government official be present should an animal require flushing from within the footprint of the construction area.

8. Fuel storage and all fueling and equipment maintenance activities would be conducted at least 100 feet from subtidal and intertidal habitat.

### **Monitoring and Reporting**

CDFW would follow a detailed monitoring plan developed in consultation with the Service and NMFS. A Service- and NMFS-approved biological monitor would monitor for marine mammal disturbance. Monitoring would occur as described in Mitigation Measure #2 above. Throughout construction activities that require a monitor, the biological monitor would maintain a log that documents numbers of marine mammals present before, during, and at the conclusion of daily activities. The monitor would record basic weather conditions and marine mammal behavior. A final report would be submitted to the Service and NMFS within 90 days of the conclusion of monitoring efforts. The report would detail the monitoring protocol, summarize the data recorded during monitoring, and contain an estimate of the number of marine mammals, by species, that may have been harassed.

### **Estimated Take by Incidental Harassment**

Based on the proposed construction methodology and mitigation, including use of an exclusion zone, no Level A harassment of southern sea otters is anticipated as a result of the proposed project. Anticipated received noise levels would remain well below the thresholds established for Level A harassment. Behavioral harassment (Level B) could result from visual disturbance and in-air noise of 100 dB re 20  $\mu$ Pa or greater for a period of 132 days and (if pile

driving is required by the project) visual disturbance, in-air noise of 100 dB re 20  $\mu$ Pa or greater, and underwater continuous noise of 120 dB re 1  $\mu$ Pa or greater for a period of 4 days.

In order to quantify take that may occur incidental to the specified activity, we determine the area that may be subject to project-related disturbance, estimate the number of sea otters likely to be present in that area, and multiply the number of sea otters by the number of days they could be disturbed during the project. Because airborne noise attenuates rapidly, and because of the distance of the project site from areas of concentrated sea otter activity (the closest such area, Yampah Marsh, is approximately 800 feet away), it is likely that few sea otters will be exposed to noise levels exceeding the 100 dB re 20  $\mu$ Pa threshold. The area potentially subject to visual disturbance from construction activity is larger than and inclusive of the area potentially exposed to airborne sound exceeding the threshold for Level B harassment. Accordingly, we do not evaluate the number of sea otters exposed to airborne noise separately from the number of sea otters exposed to visual disturbance.

Vibratory pile driving (if required) would generate visual disturbance and in-air and underwater noise for a period of 4 days. The portion of Elkhorn Slough Channel that could be exposed to underwater noise of 120 dB re 1  $\mu$ Pa or greater during pile driving is pictured in Figure 6-4 of ESA/ESNERR (2016). An estimated 15 sea otters may use this portion of the channel for foraging or traveling from one location to another. The area that could potentially be affected by visual disturbance and in-air noise of 100 dB re 20  $\mu$ Pa or greater during pile driving includes Minhoto Marsh, Parsons Slough, and Yampah Marsh, which are utilized by an average of 35 sea otters (ESA/ESNERR 2016). Up to 50 sea otters may be present on land or in water and potentially affected by vibratory pile driving for 4 days, resulting in an estimated 200 instances of take.

After sheet piles are installed (or if an earthen dam or an inflatable dam is used instead), the project site would be isolated from aquatic areas, and sea otters would no longer be able to access the work area. At that time, sea otters outside of the work area would be subject to reduced levels of disturbance. An average of 10 sea otters per day (a subset of the 50 that may be affected by vibratory pile driving) could be affected by visual disturbance and in-air noise of 100 dB re 20  $\mu$ Pa or greater during the subsequent 132 days of construction work in the northern and eastern portions of the Minhoto Marsh, resulting in approximately 1,320 takes.

## **Findings**

We propose the following findings regarding this action:

### Negligible Impact

We find that any incidental take by harassment that is reasonably likely to result from the proposed project would not adversely affect the southern sea otter by means of effects on rates of recruitment or survival, and would, therefore, have no more than a negligible impact on the species or stock (all southern sea otters are considered to belong to a single stock). In making this finding, we considered the best available scientific information, including: (1) The biological and behavioral characteristics of the species; (2) information on distribution and abundance of sea otters within the area of the proposed activity; (3) the potential sources of disturbance during the proposed activity; and (4) the potential response of sea otters to disturbance.

The estimated 200 potential takes (affecting up to 50 sea otters per day) during a total of 4 days of vibratory pile driving, if required by the project, and 1,320 potential takes (affecting up to 10 sea otters per day over a period of 132 days) during subsequent construction activity are expected to result in negligible impact for the following reasons: received noise levels would

remain well below the thresholds established for Level A harassment; sea otters do not appear to be particularly sensitive to noise (and often do not react visibly to it); and any behavioral reactions to noise or visual disturbance are expected to be temporary and of short duration. In particular, the estimate of the number of sea otters that could be harassed by exposure to project-related underwater sound based on the 120 dB threshold may overstate impacts because this threshold is sometimes at or even below the ambient noise level in certain locations.

Additionally, disturbance resulting from project activities would affect only a small portion of the sea otter habitat available to and used by sea otters in Elkhorn Slough.

The mitigation measures outlined above are intended to minimize the number of sea otters that could be disturbed by the proposed activity. Any impacts to individuals are expected to be limited to Level B harassment of short duration. Responses of sea otters to disturbance would most likely be common behaviors such as diving and/or swimming away from the source of the disturbance. No take by injury or death is anticipated. Because any Level B harassment that occurs would be of short duration, and because no take by injury or death is anticipated, we find that the anticipated harassment caused by the proposed activities is not expected to adversely affect the species or stock through effects on annual rates of recruitment or survival.

Our finding of negligible impact applies to incidental take associated with the proposed activity as mitigated through this authorization process. This authorization establishes monitoring and reporting requirements to evaluate the potential impacts of the authorized activities, as well as mitigation measures designed to minimize interactions with, and impacts to, sea otters.

#### Small Numbers

For small numbers take analysis, the statute and legislative history do not expressly require a specific type of numbers analysis, leaving the determination of “small” to the agency’s discretion. The sea otter population in California consists of approximately 3,272 animals. The number of sea otters that could potentially be taken by harassment in association with the proposed project, approximately 50 animals, is 1.5 percent of the population size. We find that the number of sea otters utilizing the affected area is small relative to the size of the population.

#### Impact on Subsistence

The subsistence provision of the MMPA does not apply to southern sea otters.

#### **Endangered Species Act**

The proposed activity will occur within the range of the southern sea otter, which is listed as threatened under the ESA. CDFW has requested a Pre-Construction Notification (PCN) under U.S. Army Corps of Engineers’ (Corps’) Nationwide Permit (NWP) 27 (USACE 2012). The Corps has initiated interagency consultation under section 7 of the ESA with the Service’s Ventura Fish and Wildlife Office. We will also complete intra-Service section 7 consultation on our proposed issuance of the IHA.

#### **National Environmental Policy Act (NEPA)**

The types of impacts associated with aquatic habitat restoration, establishment, and enhancement activities are described in NWP 27. The analyses in the NWP and the coordination undertaken prior to its issuance fulfill the requirements of NEPA (42 U.S.C. 4321 et seq.). The Service will review the Decision Document for NWP 27 and decide either to adopt it or to prepare its own NEPA document before making a determination on the issuance of an IHA. Our

analysis will be completed prior to issuance or denial of the IHA and will be available at <http://www.fws.gov/ventura/endangered/species/info/sso.html>.

### **Government-to-Government Relations with Native American Tribal Governments**

In accordance with the President’s memorandum of April 29, 1994, “Government-to-Government Relations with Native American Tribal Governments” (59 FR 22951), Executive Order 13175, Secretarial Order 3206, Department of the Interior Secretarial Order 3317 of December 1, 2011 (Tribal Consultation and Policy), the Department of the Interior’s manual at 512 DM 2, and the Native American Policy of the Service, January 20, 2016, we readily acknowledge our responsibility to communicate meaningfully with federally recognized Tribes on a Government-to-Government basis. We have evaluated possible effects on federally recognized Indian Tribes and have determined that there are no effects.

### **Proposed Authorization**

The Service proposes to issue CDFW an IHA for the nonlethal, incidental, unintentional take by level B harassment of small numbers of southern sea otters while the applicant is completing the Minhoto-Hester Marsh Restoration Project in Elkhorn Slough, Monterey County, California. The 1-year authorization would begin on the date of issuance, with an anticipated project start date between January 2017 and June 2017. Authorization for incidental take beyond the 1-year period would require a request for renewal.

The final IHA would incorporate the mitigation, monitoring, and reporting requirements discussed in this proposal. The applicant would be responsible for following those requirements.

This authorization would not allow the intentional taking of sea otters, nor take by injury or death.

If the level of activity exceeded that described by the applicant, or the level or nature of take exceeded those projected here, the Service would reevaluate its findings. The Secretary may modify, suspend, or revoke an authorization if the findings are not accurate or the mitigation, monitoring, and reporting requirements described in this notice are not being met.

### **Request for Public Comments**

The Service requests that interested persons submit comments and information concerning this proposed IHA. For information on the references cited in this notice, see **ADDRESSES**.

Consistent with section 101(a)(5)(D)(iii) of the MMPA, we are opening the comment period on this proposed authorization for 30 days (see **DATES**). We intend any final action resulting from this proposal to be as accurate and as effective as possible. Therefore, we request comments or suggestions on this proposed authorization.

We particularly seek comments concerning:

- Whether the proposed authorization, including the proposed activities, will have a negligible impact on the species or stock of the southern sea otter.
- Whether there are any additional provisions we may wish to consider for ensuring the conservation of the southern sea otter.

You may submit your comments and materials concerning this proposed authorization by one of the methods listed in **ADDRESSES**. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that

your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**Authority:** We issue this notice under the authority of the MMPA (16 U.S.C. 1371 et seq.).

Dated: \_\_January 6, 2017\_\_\_\_\_

---

Paul Souza,

*Regional Director, Pacific Southwest Region.*

[FR Doc. 2017-01271 Filed: 1/18/2017 8:45 am; Publication Date: 1/19/2017]