

directed to the Endangered Species Program Coordinator, National Marine Fisheries Service, 1 Blackburn Drive, Gloucester, Massachusetts 01930, or to the Chief, Division of Endangered Species, U.S. Fish and Wildlife Service, 300 Westgate Center Drive, Hadley, Massachusetts 01035. The 1999 Status Review may be obtained by contacting either of the above individuals or downloaded from the following site: <http://news.fws.gov/salmon/asalmon.html>. Please note that electronic mail or internet site comments will not be accepted.

FOR FURTHER INFORMATION CONTACT:

Mary Colligan, NMFS, at the address above (978-281-9116) or Paul Nickerson, FWS, at the address above (413-253-8615).

SUPPLEMENTARY INFORMATION:

The Gulf of Maine DPS includes all naturally reproducing wild populations of Atlantic salmon having historical, river-specific characteristics found in a range north of and including tributaries of the lower Kennebec River to, but not including, the mouth of the St. Croix River at the US-Canada border. The DPS includes both early and late run Atlantic salmon. Threats to the species include low marine survival, disease, the use of non-North American strains of Atlantic salmon in the U.S. aquaculture industry, aquaculture escapees, water withdrawal and sedimentation.

On November 17, 1999, the Services published a proposed rule to list the Gulf of Maine DPS of Atlantic salmon as endangered under the Endangered Species Act of 1973, as amended (ESA). Section 4(b)(5)(E) of the ESA requires that a public hearing be held if requested within 45 days of the proposal's publication in the *Federal Register*. Requests for public hearings were received within the allotted time period from Olympia Snowe, United States Senator, Chair, Subcommittee on Oceans and Fisheries, and Susan Collins, United States Senator, Chair, Permanent Subcommittee on Investigations, to be held in Machias, Maine; and Trout Unlimited, to be held in Rockland, Maine. The public hearing scheduled for January 19, 2000, in Ellsworth, Maine, which was noticed in the proposed rule (64 FR 62627; November 17, 1999), has been canceled.

Anyone wishing to make an oral statement for the record is encouraged to provide a written copy of their statement to be presented to the Services at the start of a hearing. In the event there is a large attendance, the time allotted for oral statements may have to be limited. Oral and written statements receive equal consideration.

There are no limits to the length of written comments presented at the hearings or mailed to the Services. Legal notices announcing the dates, time, and location of the hearings are being published in newspapers concurrently with this **Federal Register** notice.

Dated: January 3, 2000.

Ann Terbush,

Acting Director, Office of Protected Resources, National Marine Fisheries Service.

Dated: December 22, 1999.

Ronald E. Lambertson,

Regional Director, Region 5, Fish and Wildlife Service.

[FR Doc. 00-404 Filed 1-6-00; 8:45 am]

BILLING CODE 3510-22-F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 216

[I.D. 121699A]

Small Takes of Marine Mammals Incidental to Specified Activities; San Francisco-Oakland Bay Bridge, Pile Installation Demonstration Project, San Francisco Bay, CA

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of receipt of application and proposed authorization for a small take exemption; request for comments.

SUMMARY: NMFS has received a request from the Federal Highway Agency (FHA) on behalf of the California Department of Transportation (CALTRANS) for the harassment of marine mammals incidental to a pile installation demonstration project (PIDP) at the San Francisco-Oakland Bay Bridge (SF-OB), San Francisco Bay (the Bay), CA. Under the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to authorize CALTRANS to incidentally take, by harassment, small numbers of marine mammals in the above mentioned area for a period of 1 year.

DATES: Comments and information must be received no later than February 7, 2000.

ADDRESSES: Comments on the application should be addressed to Donna Wieting, Chief, Marine Mammal Conservation Division,

Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910-3225. A copy of the application and a list of references used

in this document may be obtained by writing to this address or by telephoning one of the contacts listed here.

FOR FURTHER INFORMATION CONTACT:

Kenneth R. Hollingshead, (301) 713-2055 ext 128, or Tina Fahy, (562) 980-4023.

SUPPLEMENTARY INFORMATION:

Background

Section 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Permission may be granted if NMFS finds 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 and if the permissible methods of taking and requirements pertaining to the monitoring and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 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."

Subsection 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can apply for an authorization to incidentally take small numbers of marine mammals by harassment. The MMPA now defines "harassment" as:

...any act of pursuit, torment, or annoyance which (a) has the potential to injure a marine mammal or marine mammal stock in the wild; or (b) 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.

Subsection 101(a)(5)(D) establishes a 45-day time limit for NMFS review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of small numbers of marine mammals. Within 45 days of the close of the comment period, NMFS must either issue or deny issuance of the authorization.

Summary of Request

On November 22, 1999, NMFS received an application from the FHA on behalf of CALTRANS, requesting authorization of an Incidental Harassment Authorization (IHA) for the possible harassment of small numbers of Pacific harbor seals (*Phoca vitulina*), and California sea lions (*Zalophus californianus*) incidental to conducting the PIDP at the SF-OBBS.

CALTRANS is currently in the planning stages of the SF-OBBS East Span Seismic Safety Project (ESSSP). The ESSSP would include driving large piles into the Bay bottom. One of the hammers anticipated to be used for this task is larger than any pile-driving hammer previously used in the Bay. Due to the untested nature of these hammers and piles in the Bay, a pile installation demonstration is needed. The PIDP will provide CALTRANS with an opportunity to measure resulting sound pressure levels (SPL), both in air and under water, record impacts to marine mammals and experiment with measures to reduce potential harm to marine mammals prior to general use on SF-OBBS piles.

The PIDP site is located between Yerba Buena Island (YBI) and Oakland, in the area to the north of and between existing SF-OBBS east span piers E6 and E9 (see figures 1 and 2 of the application). The PIDP site is approximately 2.0 km (1.24 mi) from northeast of the YBI harbor seal haul-out site, which is located immediately to the west of the lighthouse on the southernmost tip of the island.

The anticipated pier foundations for the ESSSP will consist of large diameter (up to 110-m (361-ft) long), steel pipe piles that will be driven into the Bay floor. Current plans anticipate using 2.5-m (8.2-ft) diameter piles for a majority of the foundations and smaller 1.5-m (4.9-ft) diameter pipe piles for others.

Accurately predicting the characteristics of pile driving prior to field-testing is not possible because piles of this size and length have not previously been installed in Bay substrates and there is limited experience with driving piles of this size. Therefore, given the unprecedented nature of this work in the Bay, this PIDP will provide CALTRANS with an opportunity to gather important data regarding in-air and underwater sound pressure levels generated by the pile driving activities. In addition, it will also provide an opportunity to gather data from experimental measures to attenuate elevated SPLs, thereby reducing the

potential for harm to marine mammals. Information obtained from this demonstration potentially may prove valuable for forecasting anticipated impacts of pile installation activities associated with a larger SF-OBBS east span construction, which will require the installation of approximately 350 piles of variable diameter.

Project Description

The PIDP includes driving three full-scale steel pipe piles (2,438 m (8.0 ft) in diameter, 110 m (361 ft) long) at two locations (two at a primary site and one at an alternate site) near the existing SF-OBBS east span alignment. Each pile consists of four segments of variable length and wall thickness that will each be driven, subsequently welded to another segment, and driven again until the full desired length and depth of the pile is achieved. Due to the nature of this work, the majority of the project time will be spent on surface support activities, such as picking up the pile segments, placing the segment in the correct spot and welding the segments together. Actual pile driving will only occur for a small fraction of the project's duration. Please refer to the CALTRANS application for a complete description of the pile driving order of work.

Piles will be driven open-ended by hydraulic or steam hammers. These are large offshore hammers capable of driving large-diameter, thick-walled steel pipe piles. No other types of hammers (e.g. drop hammers, diesel hammers or vibratory hammers) will be used on this project. According to project specifications, two sizes of hammers are required. A "smaller" hammer having a maximum rated energy of not less than 500 kilojoules (kJ) but not more than 1,000 kJ will be used to drive initial segments of the piles. This hammer will be similar in size to the pile driving hammer that was used for activities associated with the retrofitting of the San Mateo-Hayward Bridge, also in the Bay. A larger hammer, having a maximum rated energy of not less than 1,700 kJ will be employed to drive subsequent segments of each pile. No upper limit is placed on the maximum rated energy of the larger hammer, however there is little motivation to use a larger hammer than necessary unless there are no other hammers available at that time. Furthermore, the piles must be able to support the weight of the anvil, limiting the size of the hammer that can be used.

The PIDP is expected to take place in late spring 2000. All necessary equipment for the PIDP will be brought to the project site on barges, tugboats and other marine vessels. Due to the

high cost of the equipment being used for this project and the nature of pile installation, work will need to proceed 24 hours a day, 7 days a week for approximately 20 days barring unforeseen circumstances (i.e. broken equipment, adverse weather conditions). Actual impact hammering will only occur for a total of about 12 to 16 hours over the estimated 20 days. Continuous impact hammering would likely occur for a maximum amount of 2–3 hours at a time. As 3 piles are being driven, this maximum would only be reached on 3 days out of the 20 days of the PIDP. The hammer is expected to hit the piles at an average rate of 30–45 blows per minute.

Due to the amount of time needed between driving consecutive pile segments, it is extremely unlikely that more than two segments will be driven in a 24-hour period. It is important to note that once the driving of a pile segment begins it cannot be halted until that segment has reached its desired depth. This is not only because of the expense of keeping the equipment idle but also due to the nature of the predominantly clay soil types underlying the Bay. As piles are driven, the soil gradually loses resistance. If driving is stopped, the soil has a chance to regain its strength, and resistance to the pile increases. This can make it more difficult or even impossible to continue driving the pile, particularly if the pile tip is in a highly resistant layer at that point. Consequently, once hammering resumes, it could potentially take a longer time at increased energy levels. This could amplify impacts to marine mammals, as they would endure potentially higher SPLs for longer periods of time. Pile segment heights and wall thickness have been specially designed for this project to take the location of highly resistant sediment layers into account, so that when work is stopped at the desired depths between segments, the pile tip is never resting in highly resistant sediment layers. In addition, stopping in the middle of pile driving a segment may interfere with the goal of understanding the characteristics of pile driving within this new setting. If pile driving is permitted to be regularly interrupted, meaningful data regarding how the piles behave may be difficult to obtain.

Description of the Marine Mammals Affected by the Activity

General information on harbor seals, California sea lions, and other marine mammal species found in Central California waters can be found in Barlow *et al.* (1997, 1998). The marine mammals likely to be found in the SF-

OBB area are limited to the California sea lion and harbor seal.

California Sea Lions

While California sea lions are known to have historically used the Bay, they are rarely observed hauled out in the Bay (Bauer, 1999). However, since at least 1987, sea lions have been observed occupying the docks near Pier 39 in San Francisco, about 5.7 km (3.5 mi) from the project site. The number of sea lions hauled out at Pier 39 ranged from 63 to 737 in 1998 and from 5 to 906 in 1997 (Marine Mammal Center, Sausalito data). For both years, the lows occurred in June and the highs occurred in August. Most recently, 831 sea lions were observed on K dock at Pier 39 in October 1999. While they are present in large numbers, approximately 85 percent of the animals hauled out at this site are males, and no pupping has been observed at this site or any other site in the Bay (Lander pers. comm. to CALTRANS, 1999). At this time, no other sea lion haul-out sites have been identified in the Bay. About 90 percent of the U.S. stock breeds on the southern California Channel Islands, over 483 km (300 mi) from the PIDP site (Schoenherr, 1995; Howorth and Abbott, 1999). Pier 39 has now become a regular haul-out site for sea lions. The sea lions, most of whom are male, appear at the site after returning from the Channel Islands at the beginning of August (Bauer, 1999). Around late winter, sea lions begin to travel south to the breeding grounds, and numbers at the haul-out site decline. Lowest numbers of sea lions are usually observed from May through July. Numbers of sea lions at the haul-out site fluctuate quite a bit throughout the year and even from one week to the next. For example, in June of 1998, a maximum of 574 sea lions was observed on June 7th while a low count of 63 was observed on June 25th (Lander pers. comm. to CALTRANS, 1999).

While little information is available on the foraging patterns of California sea lions in the Bay, individual sea lions have been observed feeding in the shipping channel to the south of YBI on a fairly regular basis (Grigg pers. comm. to CALTRANS, 1999). Foraging by sea lions that utilize the Pier 39 haul-out site primarily occurs in the Bay, where they feed on Pacific herring, northern anchovy and sardines, among other prey (Hanni, 1995).

Pacific Harbor Seals

Pacific harbor seals are the only species of marine mammal that breed and bear young in the Bay (Howorth and Abbott, 1999). There are 12 haul-out sites and rookeries in the Bay and of

those, only eight are used by more than a few animals at a time. Only three sites in the Bay are regularly used by more than 40 harbor seals at any one time; these are Mowry Slough, located in the South Bay, YBI, and Castro Rocks, located in the Central Bay (Spencer, 1997). The three closest haul-out sites to the project location are at YBI, Angel Island, and Castro Rocks. The most recent aerial harbor seal count, conducted this year by D. Hanan of the California Department of Fish and Game, found 477 individuals in the Bay (Green pers. comm. to CALTRANS, 1999). It is important to note that not all harbor seals were counted, as some may have been under water during the survey.

Harbor seals are present in the Bay year-round and use it for foraging, resting and reproduction. Peak numbers of hauled-out harbor seals vary by haul-out site depending on the season. Results of a study of 39 radio-tagged harbor seals in the Bay found that most active diving occurred at night and a majority of the diving time was spent in seven feeding areas in the Bay. The two feeding areas located closest to the project site are just to the south of YBI and north of Treasure Island. This study also found that the seals dove for a mean time of 0.50 minutes to 3.33 minutes. Mean surface intervals or the mean time the seals spent at the surface between dives ranged from 0.33 minutes to 1.04 minutes. Mean haul-out periods ranged from 80 minutes to 24 hours (Harvey and Torok, 1994).

Pupping season in the Bay begins in mid-March and continues until about mid-May. Pups nurse for only 4 weeks and mating begins after pups are weaned. In the Bay, mating occurs from April to July and molting season is from June until August (Schoenherr, 1995; Kopec and Harvey, 1995).

Haul-Out Sites in the Vicinity of the PIDP

YBI is located in the Central Bay, adjacent to man-made Treasure Island. The SF-OBB passes through a tunnel on YBI. An important harbor seal haul-out site is located on a rocky beach on the southwest side of YBI (Kopec and Harvey, 1995). Work for the PIDP will be performed approximately 2 km (1.24 mi) from this harbor seal haul-out site, facing the northwest side of the island.

Although seals haul out year-round on YBI, it is not considered a pupping site for harbor seals as no births have been observed at the site. Occasionally, pups have been seen at an average of 1 pup per year, though more recently, 7 pups were observed at one time in May, 1999 (San Francisco State University

unpublished records, 1998–9). In a study of the haul-out site conducted between 1989 and 1992, males comprised 83.1 percent of the seals whose gender could be determined (Spencer, 1997). Peak numbers of harbor seals at this haul-out site have been observed from November to February. The maximum reported number of seals hauled out at one time is 344, counted in January 1992 (Kopec and Harvey, 1995). More recently, the number of seals counted at YBI ranged from 0 to 296 for the period May 1998 to present. The maximum count of 296 was recorded on January 1999. Mean monthly counts for the same period range from 14.5 in September 1998 to 107.3 in June 1999 (San Francisco State University, unpublished records 1998–9). The abundance of harbor seals at this site during the winter months likely coincides with the presence of spawning Pacific herring near the island. Re-sightings at the haul-out site indicate long-term usage of the site (Spencer, 1997).

Angel Island is a small haul-out site located approximately 7.4 km (4.6 mi) from the project site. A maximum count of 15 seals was observed in the 1980s and most recently, six harbor seals were seen in 1989. No pupping has been observed at the site.

The next closest haul-out site is approximately 14 km (8.7 mi) away at Castro Rocks, near the Richmond end of the Richmond-San Rafael Bridge. The Castro Rocks haul-out site is a recognized pupping site. A maximum of 176 harbor seals were observed at Castro Rocks in October 1999 (San Francisco State University unpublished records, 1998–9).

Potential Effects on Marine Mammals

It is possible that California sea lions and harbor seals swimming in the project vicinity may be subject to elevated SPLs that could produce a temporary shift in the animal's hearing threshold. Pile driving noise and human activity around the PIDP could also potentially result in behavioral changes in nearby pinnipeds. California sea lions and harbor seals may temporarily cease normal activities, such as feeding, or pop their heads up above water in response to the noise. They may also be curious and choose to investigate the project site. However, existing evidence shows that most marine mammals tend to avoid loud noises (Richardson, pers. comm. to CALTRANS, 1999). It is likely then that harbor seals and sea lions in the water in the project vicinity may be temporarily displaced if they choose to avoid the area in response to the high SPLs. Due to the short-term nature of

the pile driving (approximately 12 to 16 hours over 20 days) and its distance from the YBI haul-out site, the PIDP is not expected to result in long-term behavioral impacts to Bay seals or sea lions.

Based on in-air hammer noise measurements conducted elsewhere, the average received SPLs were 107 dB re 20 μ Pa measured at 10–20 meters (33–66 feet) from the hammer and between 70 dB and 44 dB re 20 μ Pa at 2,400 meters (7,874 feet or 1.5 miles) from the hammer. While a direct comparison is not possible due to different atmospheric and geographic conditions, it is anticipated that in-air noise levels at the YBI haul-out site, located approximately 2.0 km (1.24 miles) from the project site and physically shielded by the island, will attenuate to levels insufficient to cause injury to the seals and sea lions. It is also likely that harbor seals at this site will not be disturbed by the sound and leave the beach for the water, although they will most likely hear the pile driving noise.

Consequently, while it is likely that hauled-out marine mammals will hear the pile driving activities, noise levels are not expected to adversely impact them. Impact hammering could potentially harass those harbor seals that are in the water closer to the project site, whether their heads are above or below the surface. Potential impacts could include a temporary elevation in hearing threshold and/or changes in behavior patterns. However, potential harassment would only occur during those times when piles are being hammered, estimated at approximately 12 to 16 hours over 20 days.

It is difficult to estimate the number of California sea lions that could potentially be affected by the PIDP due to the lack of information on the number of sea lions in the Bay except for the Pier 39 haul-out site. However, assuming the sea lion population at Pier 39 starts to decline in the late winter as the sea lions migrate south to the rookeries, only a fraction of the animals would be left in the Bay at the time of the PIDP (late spring 2000). According to the Marine Mammal Center in Sausalito, the maximum number of sea lions observed at the Pier 39 haul-out site during the spring and summer seasons was 820 in April 1999. The mean numbers of sea lions observed at Pier 39 during spring and summer seasons were 340 in 1998 and 453 in 1997 (Lander, personal communication to CALTRANS, 1999). Because the Pier 39 haul-out site is located 5.7 km (3.5 mi) away from the project site, only a fraction of those sea lions left in the Bay at the time of the project could

potentially be in the project vicinity at any one time. Although California sea lions are known to forage in groups, available evidence suggests that they are not regularly seen in groups in the Bay waters near the PIDP site. In surveys conducted from May 1998 to the present, sea lions have been observed foraging in the shipping channel to the south of YBI. However, these sea lions are typically alone and do not seem to be associated with any other sea lions (Grigg, personal communication 1999). Given this anecdotal evidence, the number of sea lions expected to be present at the PIDP site during pile driving activities is expected to be low.

Noise levels from the project are not expected to result in harassment of the sea lions hauled out at Pier 39 as SPLs would be expected to attenuate by the time they reach the haul-out site, 5.7 kilometers (3.5 miles) from the project site. As most of the sea lions observed at Pier 39 are males, and the project will occur during the time when females and adult males are in waters off southern California for the breeding and pupping season, it is anticipated that most of the California sea lions impacted would be subadult males.

Kopec and Harvey (1995) reported harbor seal counts for several haul-out sites in the Bay for the period 1989–1992.

Peak numbers of harbor seals haul out at YBI in the winter months. The maximum recorded number of harbor seals observed at YBI is 344, recorded in January 1992. The PIDP is likely to occur in late spring of 2000. According to Kopec and Harvey (1995), the maximum number of seals observed at the YBI haul-out site during the pupping season (March–July) was 127 in 1992. More recently, for the same season, the Richmond Bridge Harbor Seal Survey reported a maximum count of 213 harbor seals observed in July 1998 (San Francisco State University, unpub. records 1998–9). Kopec and Harvey reported mean harbor seal numbers of 35.7, 41.1, 63.5 and 65.6 during the pupping seasons (March 15–May 31) of 1989 to 1992, respectively (1995). The mean number of harbor seals observed during the pupping and molting seasons (March 15 to August 15) in 1998 and 1999 were 75.2 and 78.4, respectively (San Francisco State University, unpub. records 1998–9). Keeping in mind that these mean counts were taken for slightly different periods of time (March–July in 1989–1992 and March–August in 1998–1999) and the number of surveys taken varies by count, the average of the mean counts is 60.

Mitigation

Based upon a recommendation from NMFS, CALTRANS proposes to establish a 500-m (1640-ft) radius safety zone around the pile driving site. The safety zone is intended to include all areas where the underwater sound pressure levels are anticipated to equal or exceed 180 dB re 1 μ Pa. Once pile driving begins, SPLs will be recorded at the 500-m contour. The safety zone radius will then be enlarged or reduced, depending on the actual recorded SPLs.

Before pile driving of a pile segment begins, NMFS-approved observers on boats will survey the safety zone to ensure that no marine mammals are seen within the zone. If marine mammals are found within the safety zone, pile driving of the segment will be delayed until they move out of the area. If a marine mammal is seen above water and then dives below, the contractor will wait 15 minutes and if no marine mammals are observed in that time it will be assumed that the animal has moved beyond the safety zone. Harbor seals in the Bay are known to dive for a mean time of 0.50 minutes to 3.33 minutes (Harvey and Torok, 1994). However, due to the limitations of monitoring from a boat, there can be no assurance that the safety zone will be devoid of all marine mammals.

If marine mammals enter the safety zone after pile driving of a segment has commenced, hammering will continue unabated and marine mammal observers will monitor and record their numbers and behavior. For reasons mentioned previously, once the pile driving of a segment begins it cannot be stopped until that segment has reached its predetermined depth due to the nature of the sediments underlying the Bay.

NMFS proposes to restrict actual pile driving to times when the safety zone can be monitored for the entire 15-minute monitoring period immediately prior to the start-up of pile driving. Also, in order to obtain information on the behavioral effects to harbor seals and California sea lions, NMFS proposes to require that a minimum of 50 percent of the pile driving be scheduled during daylight hours. Daylight pile driving must include both hammer types.

A 500-m (1640-ft) no-entry buffer zone will be established around the haul-out site on YBI to minimize the impact of project-related vessel traffic during the PIDP on marine mammals. This buffer zone will be established in coordination with the U.S. Coast Guard (USCG). The exclusion zone will be delineated with USCG-compliant temporary buoys to insure compliance.

CALTRANS will establish strict standards on vessel speed for all project-related crafts traveling in the Bay.

The PIDP is expected to take place in late spring 2000. This timing would not coincide with the period of peak abundance at the YBI harbor seal haul-out site (November through February). Although harbor seal pupping and mating season will be ongoing in the Bay during the PIDP, YBI is not a known pupping site. Harbor seal molting season in the Bay begins in June. If the PIDP occurs during the harbor seal molting season, a greater proportion of harbor seals should be hauled out and, therefore, not subject to the potentially elevated in-water SPLs from pile driving.

Finally, CALTRANS proposes to use this demonstration period to test the effectiveness of potential mitigation techniques. One potential mitigation measure is an underwater sound barrier based on the noise-attenuating properties of air bubbles in water. At least two experimental techniques for creating underwater sound barriers will be tested by CALTRANS. Underwater SPLs will be recorded at various distances from pile driving activities in order to assess which measures, if any, prove practical and effective in reducing sound pressure levels.

Monitoring

Monitoring of the safety zone will be conducted during all active pile driving. Monitoring of the safety zone will be conducted by a minimum of three qualified observers. The observers will begin monitoring at least 30 minutes prior to startup of the pile driving. Observers will likely conduct the monitoring from small boats, as observations from a higher vantage point (such as the SF-OB) may not be practical.

Observations will be made using binoculars during daylight hours. For operations at night, infrared or image intensifying equipment will be used. In addition to monitoring from boats, monitoring of the YBI haul-out will be conducted on land during all active pile driving. Data on all observations will be recorded and will include items such as

species, numbers, time of observation, location, behavior, etc.

Both underwater and airborne SPL measurements will be made.

Underwater Sound Monitoring

Waterborne sound from the pile driving will be measured at approximately four locations. These locations will typically be in some combination of: (i) close to the pile driving activity, (ii) two mid-point locations, and (iii) one distant location. Each measuring system will consist of a hydrophone with charge type conditioning amplifier connected to a sound level readout device and an instrumentation-grade digital audio tape (DAT) recorder. "Real-time" amplitude DAT measurements of underwater sound levels will be provided. The hydrophone will be deployed from a skiff to an appropriate depth at each location. A portable geostationary positioning system (GPS) unit will document the location coordinates of the skiff. It is anticipated that the sound level and frequency spectrum of the recorded noise signals will also be analyzed in a laboratory subsequent to the test.

Airborne Sound Monitoring

Airborne sound from the pile driving will be measured at approximately four locations that are coincident with the underwater measurement locations (i.e., typically a combination of: (i) close to the pile driving activity, (ii) two mid-point locations, and (iii) one distant location). In addition, airborne sound will also be measured at Yerba Buena Island, as close as practicable to the haul-out site. Each measuring system will consist of a Type 1 Sound Level Meter (SLM) connected to an instrumentation-grade DAT recorder. "Real-time" amplitude measurements of airborne sound levels will be provided. The SLM will be equipped with a windscreen and tripod mounted on a skiff at approximately 1.2 meters above water level. As previously stated, a portable GPS unit will document the location coordinates of the skiff. It is anticipated that the sound level and frequency spectrum of the recorded

noise signals will be analyzed in a laboratory subsequent to the test.

Reporting

CALTRANS proposes to notify NMFS prior to the initiation of the PIDP, and coordination with NMFS will occur on a weekly basis, or more often, as necessary. NMFS will be informed of the initial sound pressure levels measurements taken at the 500-m (1640-ft) contour and the final safety-zone radius established. Monitoring reports will be faxed to NMFS on a daily basis. The daily report will include species and numbers of marine mammals observed, time and location of observation, behavior. In addition the report will include an estimate of the number of California sea lions and Pacific harbor seals that may have been harassed as a result of the pile driving activities.

CALTRANS will provide NMFS with a final report detailing the monitoring protocol, a summary of the data recorded during monitoring, an estimate of the numbers of marine mammals that may have been harassed due to pile driving, and conclusions drawn from measurements with and without the attenuation measures.

Preliminary Conclusions

Based on the previous discussion, NMFS has preliminarily determined that the PIDP may unintentionally cause the harassment of California sea lions and Pacific harbor seals. Although CALTRANS has requested an authorization for Level B harassment, as a result of a behavioral modification to avoid either pile driving noise or human activity, NMFS notes that, on occasion, monitoring the safety zone may not be 100 percent effective. As a result, some harbor seals or California sea lions, while underwater in the vicinity of the PIDP, may incur levels above 180 dB re 1 μ Pa. At and above an SPL of this level, marine mammals may incur a temporary threshold shift (TTS) in hearing, lasting from a few minutes to a few hours. NMFS considers TTS to constitute Level A harassment (see § 216.3 for a definition of Level A and Level B harassment).

The PIDP is expected to have no more than an insignificant impact to marine mammals or their habitat. Harbor seals on YBI are commonly subjected to high levels of disturbance, primarily from watercraft, especially during the summer, when the numbers of small boats, jet skis, kayaks, etc. in the Bay increase. Abandonment of the haul-out site is not anticipated as sound levels from pile driving, both in water and in air, are expected to attenuate to sufficiently low levels by the time the SPLs reach the YBI haulout site. Although harbor seal pups have been observed at the YBI haul-out site, it is not a recognized pupping site and,

therefore, no significant impacts on species recruitment are anticipated. Other haul-out sites for sea lions and harbor seals area are at a sufficient distance from the project site that they will not be affected.

Proposed Authorization

NMFS proposes to issue an incidental harassment authorization to CALTRANS for the possible harassment of small numbers of harbor seals and California sea lions incidental to a PIDP at the SF-OBB, provided the previously mentioned mitigation, monitoring and reporting requirements are incorporated. NMFS has preliminarily determined that the proposed activities would result

in the harassment (as defined in the MMPA) of only small numbers of harbor seals and California sea lions and will have no more than a negligible impact on these marine mammal stocks.

Information Solicited

NMFS requests interested persons to submit comments, information, and suggestions concerning this request (see **ADDRESSES**).

Dated: December 28, 1999.

Ann D. Terbush,

*Acting Director, Office of Protected Resources,
National Marine Fisheries Service.*

[FR Doc. 00-405 Filed 1-6-00; 8:45 am]

BILLING CODE 3510-22-F