

Planning, Programs and Project Management Division

James Lecky, Director
NOAA Fisheries
Office of Protected Resources
1315 East-West Highway
Silver Spring, MD 20910

Dear Mr. Lecky:

This letter requests Incidental Harassment Authorizations (IHA) under the authority of Section 101(a)(5)(D) of the Marine Mammal Protection Act (16 USC 1361 et seq.) for work involved in the repair of the South Jetty at the Mouth of the Columbia River (MCR), Clatsop County, Oregon. IHA's are requested for the Eastern Distinct Population Segment (DPS) of Steller sea lion (also known as the Northern sea lion) (*Eumetopias jubatus*), the U.S. stock of California sea lion (*Zalophus californianus californianus*), and the Oregon/Washington coastal stock of harbor seal (*Phoca vitulina richardsi*). Work is planned for April through October of 2007 and will involve repair of damaged sections of the jetty. An Environmental Assessment for this work was prepared in compliance with the National Environmental Policy Act by the U.S. Army Corps of Engineers, Portland District and a Finding of No Significant Impact was signed on January 24, 2005 (these documents are attached). A Biological Opinion for the work in compliance with the Endangered Species Act was completed by NOAA Fisheries, dated September 27, 2006.

All applications for marine mammal IHA permits must address 14 points in sufficient detail for NOAA Fisheries to meet mandated requirements, including publication in the Federal Register. These points are addressed below:

1. A detailed description of the specific activity or class of activities that can be expected to result in incidental taking of marine mammals:

Interim repairs (expected to last 10-15 years) in 2007 at the MCR South Jetty consist of placing approximately 70,000 tons of stone on the north and south slopes of the jetty. The jetty repair work extends from Station (Sta) 258 to Sta 290 (3,200 linear feet) (each station represents 100 linear feet, station 0 being at the farthest landward point of the jetty). The stone size ranges from 10-24 tons with an average size of 16 tons. A haul road is required along the top of the jetty for travel of heavy equipment to the areas of repair.

The Contractor will rebuild the existing haul road from Sta 183 to Sta 245 (6,200 linear feet) in the reach of the jetty that is being repaired in 2006. In addition, a new haul road segment will be constructed from Sta 245 to Sta 258 (1,300 linear feet) to access the reach of the 2007 jetty repairs, bringing the total haul road length shoreward of actual

jetty rehabilitation to about 7,500 feet. Haul road materials may consist of approximately 50,000 tons of small rock material. New haul road construction to Sta 258 is anticipated to begin in April 2007 with a duration of about 4 to 6 weeks. Haul road construction and concurrent repairs from Sta 258 to the work terminus at Sta 290 (3,200 linear feet) will occur from May through October.

A lattice boom crane and a 1250 excavator will be used to place stone. Stone placement will occur from the top of the jetty. The crane and excavator will use environmentally-friendly hydraulic fluids. Four off-road end dump trucks will be used to haul the rock to the work area on the south jetty. An excavator will be used to construct the initial haul road to access the repair areas with a dozer used to build the haul road over the completed repair areas. The crane, excavator and dozer will be stored on the jetty when not in use. Fueling and maintenance will be accomplished using the Wiggins closed fueling system.

Noise will be generated above and below the water by operation of construction equipment and related activities. The trucks and crane used to move the jetty rocks will generate a moderate degree of noise.

2. The date(s) and duration of such activity and the specific geographical region where it will occur:

The work will occur from April through October, 2007. The Contractor will work 7 days per week, sunrise to sunset depending on weather and wave conditions. The rehabilitation work will occur from Sta 183 and extend 10,700 feet to Sta 290. Hauling of rock, however, will begin at the rock storage site located at Sta 175, so the entire length of the action area will be 11,500 feet, or about 2.2 miles.

3. The species and numbers of marine mammals likely to be found within the activity area:

The Eastern DPS Steller sea lion, listed as threatened under the ESA, and the California sea lion regularly use the MCR South Jetty as a haulout, while the harbor seal is an infrequent visitor (Table 1). Work will occur from April through October when up to 700 Steller sea lions, 100 California seal lions, and 5 harbor seals, may be present in the action area.

Table 1. Average number of pinnipeds per month recorded on the Mouth of the Columbia River South Jetty, Oregon for 1995-2004 (data from Oregon Department of Fish and Wildlife).

Month	Number of years surveyed	Average number of Steller sea lions	Average number of California sea lions	Average number of harbor seals
January	1	246	18	0
February	4	246	50	0
March	1	635	39	0
April	3	613	48	1
May	4	252	42	0.75
June	8	245	82	1.75
July	4	385	56	0
August	2	486	27	0
September	0	NA	NA	NA
October	1	168	63	0
November	1	923	297	0
December	1	1106	725	0

During work on the MCR South Jetty in 2006, that finished at Sta 245 on October 6, one California sea lion was noted on September 5 and 6 at approximately Sta 240. This was a branded individual and thought to be in transit from the Puget Sound Region. During the week of October 1, approximately 10 sea lions flushed into the ocean near Sta 258. This group flushed when they saw a worker walking on the jetty, at a distance of 50-100 feet from the worker.

4. A description of the status, distribution, and seasonal distribution (when applicable) of the affected species or stocks of marine mammals likely to be affected by such activities:

Steller Sea Lion

The Eastern DPS Steller sea lion is listed as threatened under the Endangered Species Act. Breeding occurs at rookeries from Alaska to California, although no rookeries are present in Washington waters. While Steller sea lions breed in Oregon, they use the MCR South Jetty solely as a haul out area. The jetty is not designated as a rookery.

The Steller sea lions that use the south jetty as a haulout use rookeries in Southern Oregon and British Columbia. The breeding season occurs from late May to early July, thus corresponding to lower numbers at the south jetty. The Steller sea lion is not known to migrate, but they disperse widely outside this breeding season. Steller sea lions are

present, in varying abundances, all year (see table under Section 3) but are more numerous in the winter. Abundance is typically lowest from May-July as many of the adults are at the breeding rookeries. Only non-breeding individuals are found on the jetty during this time, and a greater percentage of juveniles are present. Abundance increases following the breeding season. All population age classes, and both males and females use the jetty for haulout. Adult males tend to disperse from the MCR South Jetty in late summer and fall.

The total population size of the Eastern DPS is estimated at about 45,000 individuals. Steller sea lion numbers in Oregon were fairly stable during the 1980's, with gradual increases shown to the present.

California Sea Lion

California sea lions are not listed under the ESA. The U.S. stock occurs from northern Washington to southern California. Major rookeries are found in waters of southern California and Baja California. Only male California sea lions occur at the MCR South Jetty, as post-breeding dispersers from the south. They, like Steller sea lions, are present all year (see Table under Section 3), but also are more numerous in winter.

The total population size of the U.S. stock of California sea lions is about 240,000 individuals. El Nino events are known to negatively influence pup production, but pup counts have generally increased since the mid-1970's.

Harbor Seal

Harbor seals are not listed under the ESA. The Oregon/Washington coastal stock of harbor seals occur from northern Washington to southern Oregon and are generally non-migratory. Harbor seals breed and pup throughout their range, including the vicinity of the Columbia River. They use the Columbia River extensively throughout the year and only rarely have been noted on the MCR south jetty.

The total population size of the Oregon/Washington coastal stock of harbor seals is estimated at about 25,000 individuals. The stock was heavily hunted for bounty, even into the 1970's. The stock has increased since then and data from Oregon suggest that it may be nearing equilibrium.

5. The type of incidental taking authorization that is being requested (i.e., takes by harassment only; takes by harassment, injury and/or death) and the method of incidental taking:

Incidental take is being requested for Steller sea lions, California sea lions, and harbor seals. Incidental take would result from heavy equipment operation on the MCR

South Jetty, possibly in close proximity to the three subject species. Trucks and excavators will be used in construction of a haul road on top of the jetty and placement of rock on the jetty. Incidental taking to occur will be a temporary and localized disturbance of animals from elevated sound levels and visual stimulus from construction activities on the jetty and in the water.

Intentional take, for the protection of animals, is covered under Section 109 of the Marine Mammal Protection Act. Intentional take, which could include hazing for example, is not expected to be required during construction. Oregon Department of Fish and Wildlife routinely collect sea lion scat on the MCR South Jetty for diet analysis from October through December and Steller sea lions and California sea lions have not required intentional take (i.e. they move in response to human activity).

6. By age, sex, and reproductive condition (if possible), the number of marine mammals (by species) that may be taken by each type of taking identified in paragraph (5) of this section, and the number of times such takings by each type of taking are likely to occur:

Pinnipeds have been observed hauling out primarily seaward of Sta 250 on the MCR South Jetty. Steller sea lions, however, typically haul out oceanward of the farthest point at which work will occur in 2007. When construction activities occur within about 300 feet or less of an observed haulout area, incidental harassment causing animals to flush from the jetty may occur. From past experience, about 50 Steller sea lions were observed to flush from the jetty on June 20, 2006 from a distance of about 300 feet upon approach of a boat. Other groups of Steller sea lions, however, did not flush at this approach distance. A group of 5 California sea lions were approached on the same day and did not flush at a distance of about 100 feet.

The level of take is expected to be greater than the take that occurred during 2006 construction because work will occur farther oceanward where sea lions are known to be more common (Table 2). As noted in section 3, during work on the MCR South Jetty in 2006 that finished at Sta 245 on October 6, one California sea lion was noted on September 5 and 6 at approximately Sta 240. This was a branded individual and thought to be in transit from the Puget Sound Region to the north, and was flushed from the jetty on both days. During the week of October 1, approximately 10 sea lions flushed into the ocean near Sta 258. This group flushed when they saw a worker walking on the jetty, at a distance of 50-100 feet from the worker (flushing may have occurred at a greater distance had the worker been visible to the sea lions earlier than they were). Therefore, a total of 12 incidental takes occurred involving 11 animals over 3 days during 2006 construction.

Table 2. Expected incidental harassment take of pinnipeds per day during the months of construction at the Mouth of the Columbia River South Jetty, Oregon for April through October, 2007.

Month	Steller sea lions	California sea lions	harbor seals
April	0	0	1
May	25	45	1
June	25	82	2
July	39	56	0
August	49	27	0
September	49	63	0
October	17	63	0

These estimates are based on past count data and the assumption that only about 10% of all Steller sea lions would occur within range of disturbance, and none would occur within the range of disturbance during the first months. The majority of animals are likely to be hauled out more than several hundred feet from the farthest oceanward point of work. California sea lions are known to use areas of the jetty more shoreward than Steller sea lions. It is assumed that all California sea lions and harbor seals present on the MCR South Jetty could be subject to disturbance.

Note that since no data was available for September for any of the subject species, the higher of the estimates for August and October was used as an estimate for September. Also, numbers of sea lions and seals expected to be harassed are not necessarily total numbers of individuals, but could be the same individuals harassed on multiple days.

Steller sea lions to be disturbed could include males, females, and juveniles from June through August (work in April will involve road construction on the jetty landward of haulout areas). Primarily females and juveniles would be subject to disturbance during September and October as males tend to leave the MCR South jetty in late summer and fall and utilize other haul out sites in Oregon, Washington, and British Columbia.

California sea lions to be disturbed during June through October would include only adult males that have dispersed from breeding grounds. For harbor seals, males, females, and juveniles could be disturbed and could occur at more landward points than sea lions and thus could be disturbed even during the first month of road construction on the jetty.

Abundance of sea lions and seals subject to harassment may decline over the work period, since animals may not haulout in the location of the work area once they have been subjected to a few disturbance events. California sea lions are comparatively

more resilient to disturbance events. It is expected that the large majority of Steller sea lions will occur on the jetty seaward of Sta 290 and will not be disturbed by construction.

7. The anticipated impact of the activity upon the species or stock:

The anticipated impact upon the sea lions and harbor seals includes temporary disturbance (flushing) and temporary displacement of animals to other parts of the jetty or other nearby haulouts until work is discontinued. Other haulouts are available for harbor seals throughout the Columbia River estuary, and for sea lions on other parts of the south jetty, the north jetty, or rocky headlands in northern Oregon, northern California, or southern Washington. Observations in the past have shown that animals that are flushed from the jetty do not leave the vicinity. Animals that flush from the jetty would be expected to move to other parts of the jetty, likely seaward of the point of disturbance.

8. The anticipated impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses:

No impact.

9. The anticipated impact of the activity upon the habitat of the marine mammal populations, and the likelihood of restoration of the affected habitat:

Repairing the south jetty by adding more rock will not reduce the availability or accessibility of habitat for Steller and California sea lions and harbor seals. Seals and sea lions use the existing tip of the jetty that is built of concrete blocks, and are easily able to climb up several vertical feet from one block to the next. They also use sections of the jetty composed of angular jetty stone in areas of differing slope and commonly use side slopes and the top of the jetty. On the angular jetty stone, they tend to occur at the top of the jetty during the winter when larger swells are present. They have excellent climbing abilities on concrete blocks and jetty stone and therefore are expected to easily make use of the repaired jetty.

10. The anticipated impact of the loss or modification of the habitat on the marine mammal populations involved:

Temporary disturbance at the haulout during construction repair is not expected to reduce post-construction use of the area by the affected species. The MCR south jetty is not designated critical habitat for the Steller sea lion under the ESA.

11. The availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, their habitat,

and on their availability for subsistence uses, paying particular attention to rookeries, mating grounds, and areas of similar significance:

All rock placement will be done via crane and excavator from the top of the jetty. Rookeries, mating grounds, availability for subsistence uses and long term adverse impacts on habitat are not anticipated.

12. Where the proposed activity would take place in or near a traditional Arctic subsistence hunting area and/or may affect the availability of a species or stock of marine mammal for Arctic subsistence uses, the applicant must submit either a "plan of cooperation" or information that identifies what measures have been taken and/or will be taken to minimize any adverse effects on the availability of marine mammals for subsistence uses:

The proposed project will not take place in or near a traditional Arctic subsistence hunting area.

13. The suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species, the level of taking or impacts on populations of marine mammals that are expected to be present while conducting activities and suggested means of minimizing burdens by coordinating such reporting requirements with other schemes already applicable to persons conducting such activity. Monitoring plans should include a description of the survey techniques that would be used to determine the movement and activity of marine mammals near the activity site(s) including migration and other habitat uses, such as feeding. Guidelines for developing a site-specific monitoring plan may be obtained by writing to the Director, Office of Protected Resources:

The Corps will report the number of sea lions and seals (by species if possible) present on the south jetty for 1 week before starting work. During construction, the Corps will provide weekly reports to NOAA Fisheries which will include a summary of the previous week's numbers of sea lions and seals that may have been disturbed as a result of the jetty repair construction activities. These reports will provide dates, time, tidal height, maximum number of sea lions and seals on the jetty and any observed disturbances. The Corps also will provide a description of construction activities at the time of observation. Post-construction monitoring shall occur, one count every 4 weeks for 8 weeks, to determine recolonization of the south jetty. The Corps will submit a report to NOAA Fisheries within 90 days of completion of the 2006 construction and another report at the end of the 2007 phase of the project.

14. Suggested means of learning of, encouraging, and coordinating research opportunities, plans, and activities relating to reducing such incidental taking and evaluating its effects:

The Oregon Department of Fish and Wildlife, who monitor sea lion use of the South Jetty, will also be apprised of our work and results of monitoring efforts.

If you have any questions regarding this project, please contact Steve Helm 503-808-4778 or e-mail at steve.r.helm@usace.army.mil.

Sincerely,

Robert E. Willis
Chief, Environmental Resources Branch

Enclosure
Environmental Assessment and Finding of No Significant Impact for the project

Cc:
Ken Hollingshead, NOAA Fisheries
Brent Norberg, NOAA Fisheries