



November 4, 2009

Barry Thom, Acting Regional Administrator
Northwest Region Office
National Marine Fisheries Service
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Dear Dr. Thom:

This letter summarizes activities conducted under the Marine Mammal Protection Act Section 120 lethal removal authority granted to the States of Oregon and Washington by National Marine Fisheries Service (NMFS) to reduce California sea lion predation on threatened and endangered Columbia River salmonids. The following information comprises our annual report to NMFS documenting the various activities conducted in the area below Bonneville Dam, demonstrating the States' compliance with the terms and conditions of the Letter of Authority (LOA) in 2009, and outlining our plans for work in 2010 (LOA Condition 13).

As required under the LOA (Condition 4), our Animal Care Committee (ACC) (see Appendix A) was consulted on activities conducted during the 2009 field season and for activities proposed for 2010. The committee monitored our activities throughout the season and individual members of the committee participated in the capture, transfer, medical screening, and post-mortem examinations of sea lions taken under the LOA.

U.S. Army Corps of Engineers (USACE) Fisheries Field Unit staff began regular observations of pinniped predation on salmonids at the face of Bonneville Dam on January 14 and continued through May 29, 2009. USACE deployed sea lion barriers in fish passage entrances, as well as underwater acoustic deterrent devices as they have in previous years. Under contract with USACE, United States Fish and Wildlife Services staff (USDA) used non-lethal hazing tools deployed from various project locations to deter predatory sea lions feeding near the fish passage entrances. The States worked directly with USACE to conduct the overall observation program, carry out non-lethal boat-based hazing of pinnipeds below Bonneville Dam, and conduct California sea lion capture, marking and removal operations. This work included efforts to document pinniped presence, abundance, foraging behaviors, salmonid consumption, identify individual animals, employ non-lethal hazing tools and remove predatory California sea lions.

These efforts were directed at evaluating the impact of predation on salmonid passage at Bonneville Dam, determining the effectiveness of non-lethal hazing, identifying predatory sea lions, and ultimately evaluating the results achieved by removing predatory sea lions from the Bonneville Dam area (LOA Condition 12).

The results of the 2009 observation program have been presented in an USACE 2009 field report (<http://www.nwd-wc.usace.army.mil/tmt/documents/fish/>). The results of the States' 2009 hazing and sea lion removal efforts have also been presented in an annual field report (provided under separate cover). In summary, non-lethal hazing was unsuccessful at controlling sea lion predation. The "expanded" salmonid catch estimate in 2009 was 4,489 fish, the largest on record since predation observations began. The majority of this predation was from California sea lions (4,014 salmonids) with Steller sea lions responsible for an additional 475 salmonids killed. These estimates are considered minimum salmonid losses as predation estimates are only for kills in the Boating Restricted Zone and do not include kills outside of this area.

In 2009, we attempted to transfer as many of the captured predatory sea lions to permanent holding facilities as possible (LOA Condition 5). A total of 21 California sea lions were captured: four were transferred into permanent captivity (two to the Shedd Aquarium in Chicago IL and two to the Gladys Porter Zoo in Brownsville TX); six were marked, instrumented and released (two of the latter were recaptured and released again); and eleven were chemically euthanized after it was determined their health status would not permit their transfer to holding facilities.

Following discussions with ACC members in 2008, the trapping and monitoring protocols developed for and used in 2009 (locking traps open when not in use, changing trap release system to wireless remote operation, increasing trap monitoring, increased hazing of Steller sea lions near the traps) had the desired effect of preventing an accidental trapping event, such as the one that occurred in May 2008. No unplanned trapping or mortality events occurred during the 2009 project period

The States notified NMFS of all sea lion capture and removal operations within the required three day period (LOA Condition 11). Captured sea lions were transferred to temporary and permanent holding facilities according to applicable state and federal laws (LOA Condition 10). The carcasses of those animals that were euthanized were also disposed of according to state and local ordinances. The States did not remove more than 1% of the annual CA sea lion PBR (as specified in LOA Condition 3).

Firearms were not used to remove predatory sea lions in 2009 and carcass removal from the water was not required (LOA Conditions 6 and 7).

The States (WDFW Enforcement and Oregon State Police) coordinated safety and security during removal activities among all agencies involved with the process in cooperation with the Columbia Basin Law Enforcement Council (LOA Condition 8). This action included the establishment of an Incident Command Center (ICC) that coordinated security and safety with USACE, U.S. Coast Guard, Columbia River Intertribal Fish Commission, Idaho Department of Fish and Game, and local law enforcement in Oregon and Washington during capture, removal and transportation operations.

The States worked directly with USACE, Portland District and the Bonneville Lock and Dam Project Manager prior to and during capture and removal operations (LOA Condition 9). The assistance provided by Bonneville Project staff was critical to our work and was very much appreciated. The ICC also worked directly with the Bonneville Project on safety, security and access issues during our removal operations.

The LOA provided by NMFS to the States included an initial list of predatory California sea lions that met the criteria for removal as defined by NMFS (LOA Condition 1). The States worked directly with USACE observation program staff to identify additional sea lions that met the criteria for removal as they were observed consuming salmonids in the area and were exposed to non-lethal hazing efforts. Since the last addition of removal candidates on 5/18/09, USACE Fisheries Field Unit staff identified two additional predatory sea lions that meet the removal criteria (see Appendix B). These two sea lions have met the criteria for inclusion on the removal list by having been observed at the dam a total of five or more days in any year(s), were seen to consume salmonids in the observation area, and were exposed to non-lethal hazing efforts during the same period. With the submission of this letter the States are requesting that NMFS add these individuals to the list of predatory sea lions approved for removal (LOA Conditions 1, 2 and 14).

In our report last year we mentioned that a small number of California sea lions were observed preying on salmonids attempting to pass Bonneville Dam during the fall of 2008. This is a new phenomenon that we are very concerned about. Several sea lions have been observed at the dam early in the fall of 2009 as well. We will continue to monitor this situation and will be prepared to use traps to remove any of these individuals that meet the criteria defined in the LOA. As you know, the problem at Bonneville Dam in the spring months began a little more than five years ago with just a handful of sea lions preying on salmonids. The time to limit this newly observed fall predation is now, while we are dealing with only a small number of individual animals and before others sea lions begin to mimic this foraging pattern. At least one of the sea lions seen at the dam this fall is currently on the removal list.

A second observation of note includes a documented increase in Steller sea lion predation on salmonids near the dam over previous years (see USACE 2009 field report). Currently the States do not have the additional resources needed to deal with this emerging problem. At this time, the only tool available to address with this situation is to use the same non-lethal hazing tools which have proven to be largely ineffective at limiting predation by California sea lions.

A third problem encountered this year consists of the passage of a California sea lion (C697) through the locks while riding on a barge into the forebay area above the dam. C697 has remained in the area above Bonneville Dam since late May. The animal has been observed feeding on salmonids that have already passed through the fish passage and counting system as they exit into the river above the dam. This sea lion has met all the criteria for removal (presence in the area, exposure to hazing) except that it has not been observed taking a salmon in the observation area "below the dam," as currently required under the LOA. The States believe that this animal, and any others that may display the same behavior of consuming salmonids above the dam while meeting all of the other criteria for removal, should be candidates for removal.

The States and our cooperating agencies are moving forward with plans to continue the use of shore and boat-based non-lethal hazing of sea lions below Bonneville Dam beginning in March of 2010. Early in February we are planning to deploy sea lion traps in several areas around the dam. In 2010, trapping is expected to take place from February through May. As was the case in 2009, our first priority will be to fill requests from facilities identified by NMFS that would like to permanently house any of these predatory California sea lions. If no facilities are available, we plan use drugs to euthanize any captured animals that have been identified for removal. Use of firearms as a removal tool will continue to be an option and may be used according to the conditions of the LOA in situations where trapping is ineffective.

We also intend to mark any unknown California sea lions that may be captured on the traps and release them in the same area. We may deploy acoustic tags to some of these animals to further document their movements and foraging patterns in the Bonneville Dam area (e.g., night activities, proportion of time spent in and out of the BRZ and observation areas). We will continue to collect fecal samples from all haul-out sites in the area to identify the variety of prey taken pinnipeds while in this area including genetic identification of salmonid stocks consumed.

We thank you for your assistance and support of our work to reduce sea lion predation on threatened and endangered salmonids below Bonneville Dam and look forward to working with you on this project in the years to come. Please let us know if we can provide further information related to our annual reporting obligations.

Sincerely,



Roy Elicker, Director
Oregon Department of Fish and Wildlife
3406 Cherry Avenue N.E.
Salem, Oregon 97303
Ph: 503-947-6044



Phil Anderson, Director
Washington Department of Fish & Wildlife
600 Capitol Way N.
Olympia, Washington 98501-1091
Ph: 360-902-2720

APPENDIX A

Columbia River Sea Lion Project Animal Care Committee Membership

Robert L. DeLong, PhD, Chair
National Marine Mammal Laboratory
7600 Sand Point Way N.E., Bldg 4
Seattle WA 98115
Robert.delong@noaa.gov

Steven Jeffries
Washington Dept. of Fish & Wildlife
7801 Phillips Rd SW
Lakewood WA 98498
Jeffrsjj@DFW.WA.gov

Robin Brown
Oregon Dept. of Fish & Wildlife
7118 NE Vandenberg Ave.
Corvallis OR 97330
Robin.F.Brown@state.OR.US

Dr. Colin Gillin, DVM
Oregon Dept. of Fish & Wildlife
7118 NE Vandenberg Ave.
Corvallis OR 97330
Colin.M.Gillin@state.OR.US

Dr. Perigrine Wolf, DVM
Oregon Dept. of Fish & Wildlife
7118 NE Vandenberg Ave.
Corvallis OR 97330
Peregrine.L.Wolff@State.OR.US

Dr. Kristen Mansfield, DVM
Washington Dept. of Fish & Wildlife
2315 North Discovery Place
Spokane Valley WA 99216-1566
Mansfkgm@DFW.WA.Gov

Joe Gaydos, VMD, PhD
The SeaDoc Society
942 Deer Harbor Road
Eastsound WA 98245
jkgaydos@ucdavis.edu

John Rupp
Marine Mammal and Fish Curator
Point Defiance Zoo and Aquarium
Tacoma WA 98407
Jrupp@Pdza.org

Dr. Frances Gulland, DVM, PHD
The Marine Mammal Center
1065 Fort Conkrite, GGNRA
Sausalito CA 94965
Gullandf@tmmc.org

Dick Conroy
Member At Large
Altbaer@msn.com

APPENDIX B

Proposed list of additional predatory California sea lions meeting criteria
for permanent removal

ID	Totals			Observed days in tailrace (salmonids consumed)							
	Years observed	Days observed	Salmonids consumed	2009	2008	2007	2006	2005	2004	2003	2002
C934/B300	1	8	3	8 (3)							
B299	1	8	13	8 (13)							