January 27, 2016

Ms. Eileen Sobeck
Assistant Administrator
NOAA Fisheries
1315 East West Highway
Silver Spring, MD 20910

Mr. William W. Stelle, Jr.
West Coast Regional Administrator
NOAA Fisheries
7600 Sand Point Way NE
Seattle, WA  98115

Dear Ms. Sobeck and Mr. Stelle:

We are writing to request a five-year extension of the National Oceanic and Atmospheric Administration’s Fisheries Service (NOAA Fisheries) Letter of Authorization (LOA) to the states under Section 120 of the Marine Mammal Protection Act for the lethal removal of predatory California sea lions known to forage in the vicinity of Bonneville Dam through June 30, 2021. We are not requesting any modification to the existing LOA of March 15, 2012. It is our intention to exercise our authority as we have since the original authorization in 2008.

While California sea lion abundance and predation rates in the Columbia River near Bonneville Dam have fluctuated over the years, the number of sea lions in the area and their consumption of salmonids have been increasing sharply since 2013. We therefore wish to retain our authority to lethally remove California sea lions at Bonneville Dam as authorized under the existing LOA.

Several stocks of salmon and steelhead listed under the Endangered Species Act (ESA) that are targeted by predatory sea lions remain severely depressed. It is critical that we recover these upriver stocks and this LOA must remain in place to prevent these stocks from becoming further depressed.

Following, you will find a summary of the status and management of salmonid sea lion and salmonid populations as they relate to the situation at Bonneville Dam. This information is the basis and rationale for our request.
Thank you for considering this request. The states look forward to continuing to work with NOAA Fisheries in protecting these up-river salmon and steelhead stocks from sea lion predation at Bonneville Dam.

Sincerely,

Virgil Moore
Director, Idaho Department of Fish and Game

Curtis E. Melcher
Director, Oregon Department of Fish and Wildlife

James Unsworth, Ph.D.
Director, Washington Department of Fish and Wildlife

Enclosure
REQUEST FOR 5-YEAR EXTENSION
MMPA SECTION 120 AUTHORIZATION

REMOVAL OF PREDATORY CALIFORNIA SEA LIONS
FROM THE COLUMBIA RIVER

JULY 1, 2016 – JUNE 30, 2021

SUBMITTED BY
OREGON DEPARTMENT OF FISH AND WILDLIFE
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
IDAHO DEPARTMENT OF FISH AND GAME

November 6, 2015
**Statement of Purpose**

The purpose of this document is to request a 5-year extension, without modification, of the current Letter of Authorization (LOA)\(^1\) granted the Oregon Department of Fish and Wildlife, the Washington Department of Fish and Wildlife, and the Idaho Department of Fish and Game (hereafter called “the States”) for lethal removal of California sea lions (CSL) predating salmonids listed as threatened or endangered under the Endangered Species Act (ESA) at Bonneville Dam on the Columbia River under Section 120 of the Marine Mammal Protection Act (MMPA).

**Background**

The States originally applied for MMPA Section 120 lethal removal authority in December 2006. NOAA Fisheries partially approved that request in 2008 and issued letters of authorization to lethally remove individually identifiable predatory CSL at Bonneville Dam. The Humane Society of the United States subsequently filed a lawsuit claiming that NOAA Fisheries' decision violated the MMPA and National Environmental Policy Act. NOAA Fisheries prevailed in district court, but the Ninth Circuit vacated and remanded the states' LOA in November 2010. In response the States reapplied for MMPA Section 120 authority in August 2011 and were again approved by NOAA Fisheries which issued our current LOA in March 2012. In September 2013, the U.S. Court of Appeals for the Ninth Circuit affirmed and upheld NOAA Fisheries action to grant the States the 2012 LOA, which is set to expire June 30, 2016. A complete chronology of these events can also be found at the NOAA Fisheries West Coast Region website\(^2\).

**Summary of Section 120 LOA Actions**

Since receiving Section 120 authorization in 2008, the States have intentionally removed 100 CSL from the Columbia River (Table 1). Fifteen CSL were transferred live to permanent holding facilities for public display and 85 CSL were chemically euthanized. An additional seven CSL died unintentionally during trapping and handling operations. All capture, handling, transfer, and euthanasia procedures were reviewed and approved by the project Institutional Animal Care and Use Committee (per LOA Terms and Conditions #4). Each unintended mortality event was reviewed and IACUC recommendations for modifications to equipment and procedures were implemented.

Removal of the most dominant predatory CSL from the Columbia River has successfully contributed to reducing salmonid losses at Bonneville Dam. For example, the States estimate that removals have prevented the loss of 15,000-20,000 salmonids at Bonneville Dam since the program began\(^3\). In addition, up until 2014-2015, data collected by the U.S. Army Corps of Engineers.

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\(^3\) Field Report: 2015 Pinniped Research and Management Activities at Bonneville Dam (ODFW, WDFW, CRITFC October 30, 2015).
Engineers Fish Field Unit (USACE FFU) showed that CSL abundance and predation decreased at the dam following the initiation of removals in 2008 (Figure 1).

Need for Continued Management of Predatory CSL in the Columbia River

The States, NOAA Fisheries, and USACE, along with many other agencies and organizations, have undertaken a large number of actions aimed at reducing the losses of ESA-listed salmonids from a number of sources. These combined actions represent an extraordinary and unprecedented cooperative effort in the Columbia River region to protect and recover salmon and steelhead. ESA-guided recovery plans have been developed and implemented in every watershed, including actions to: restore important habitat; improve dam passage survival; re-tool hatchery programs to assist production in wild populations; and close, reduce or reshape fisheries to limit fishery-related mortality of listed stocks and focus on selectively harvesting healthy stocks. These efforts equate to hundreds of millions of dollars invested annually and billions over the past decades.

Many Columbia Basin salmonid populations, however, remain at critically low abundance levels and predatory CSL at Bonneville Dam represent a relatively new and significant source of mortality. The presence of large numbers of CSL at Bonneville Dam did not occur to any significant degree prior to the late 1990s. This phenomenon has created a new and additive source of mortality of ESA-listed salmonids that must be managed along with all other factors that have negative impacts on the recovery of these fish populations. Indeed, one of the seven factors that NOAA Fisheries relied upon in their 2012 "Report on Consideration of Statutory Factors under Section 120 of the MMPA" was that the mortality rate due to CSL predation on salmonids was comparable to rates from other sources that have resulted in the agency using its statutory authority under the ESA to reduce the impact. This conclusion, upheld by the U.S. 9th Circuit Court of Appeals, is no less valid today than it was at the time of the original determination.

The other six factors NOAA Fisheries used to determine “significance” that were upheld by the court also remain applicable: 1) the predation is measurable, and while it appeared to decline during the early years of predatory CSL removals, it has recently increased again and most likely would continue to do so if not addressed; 2) ongoing nonlethal deterrence efforts have been unsuccessful at reducing CSL numbers and predation; 3) the level of adult salmonid mortality is sufficiently large to have a measurable effect on the numbers of listed salmonids contributing to the productivity of the affected populations; 4) in 2015 CSL numbers and predation losses exceeded that observed in any year since observations began in 2002 (source: USACE FFU), demonstrating that CSL abundance is unpredictable and can easily grow; 5) the proportion of salmon in a run that are taken by CSL increases when salmonid run sizes decrease; and 6) sea lion predation on at-risk salmonids at Bonneville Dam has an additive effect. Based on the continuing relevance of these factors, the States conclude that the problem of CSL predation on listed salmonids in the area of Bonneville Dam remains a significant problem and will only grow worse if predator removals cease.

The observed variability in salmonid run sizes and CSL numbers from year-to-year continue to be of particular concern and would be exacerbated in the absence of an ongoing predator
management program. In years when salmonid abundance is low and CSL numbers are high, the negative impact of predation is intensified due to the fact that a higher proportion of the salmon return is taken in such circumstances (Figure 1, panel c). Recent oceanographic trends indicate that Columbia Basin salmonids may experience lower survival and declining returns in the immediate future. In contrast, over the past three years, possibly in response to changing coastal ocean conditions and prey distributions, CSL numbers in the estuary and lower Columbia River during late winter and spring have increased remarkably; from several hundreds of animals prior to 2013 to several thousand in 2015 (Figure 2). Many of these additional animals in the lower river have found their way to upriver to Bonneville Dam, reversing the declining trend in CSL numbers seen there since the predator removal program began (Figure 1, panel d). This recent increase in numbers at Bonneville Dam is evidence that continued management efforts to remove predatory CSL will be required to manage mortality of ESA-listed salmonids at this location.

Some CSL are also inadvertently passed upriver through the navigation lock at Bonneville Dam along with river traffic. While some of these animals have been successfully captured and relocated back downriver, two CSL are known to have been living near The Dalles for at least four years. Even assuming only a partial diet of salmonids, these animals have likely consumed thousands of salmonids in this stretch of river over that period. Cessation of the predatory CSL management program below Bonneville Dam would increase the opportunity for CSL numbers to grow in the Bonneville Pool above the dam, further exacerbating the problem of predation on ESA-listed salmonids in the river.

Lastly, CSL predation on salmonids at Bonneville Dam may only be the "tip of the iceberg" in terms of its contribution to total river-wide pinniped predation. For example, ongoing work by NOAA Fisheries researchers near the mouth of the Columbia River has shown compelling circumstantial evidence that salmonid losses at the dam may significantly underestimate the extent of total river-wide predation4.

Conclusion

The predatory CSL management actions authorized under the current LOA have had positive results and have successfully reduced the losses of ESA-listed salmonids below levels that would have occurred without such a program in place. However, it is also clear that the ultimate goal of eliminating the significant negative impact of CSL predation on listed salmonids in the lower Columbia River has not yet been achieved. In light of this conclusion and in consideration of the foregoing information, the States hereby request that NOAA Fisheries extend the current LOA for removal of predatory CSL at Bonneville Dam for an additional five years beyond the expiration of the current authority on June 30, 2016, for a new five-year period of July 1, 2016 to June 30, 2021. The States are requesting no modifications to the authorities provided under the existing LOA and anticipate no significant changes to the predatory CSL removal operations currently underway.

4http://www.nwcouncil.org/media/7148426/f1.pdf
Table 1. Summary of California sea lion removal activity since initiation of MMPA Section 120 program. Removals are categorized by location animal was captured (Bonneville Dam or Astoria) and outcome (permanent captivity, chemical euthanasia, or accidental mortality).

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<th>Accidental</th>
<th>Astoria Euthanized</th>
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Figure 1. Annual summary of (a) total salmonid passage from January 1 through May 31, (b) total salmonid predation by CSL, (c) predation as the proportion of total passage plus predation, and (d) the minimum estimated number of observed CSL (source: USACE).
Figure 2. Maximum monthly haul-out counts of California sea lions at the East Mooring Basin, Astoria, Oregon (source: ODFW).