

Response to Public Comments – NOAA-NMFS-2017-0126

State of Oregon Marine Mammal Protection Act Section 120 Application for Lethal Removal of Predatory California Sea Lions at Willamette Falls

October 2018

The National Marine Fisheries Service (NMFS) published the state of Oregon (state) Marine Mammal Protection Act (MMPA) section 120 application in the Federal Register on November 9, 2017, and accepted comments from the public for 60 days. *See* 82 FR 52038. We received 792 public comments, most of which were generic letters supporting (677) or opposing (99) the permanent removal of California sea lions (CSL) in the Willamette River. Sixteen comment letters were either Task Force nominees or stated no preference supporting or opposing the state's application. In our response to comments, we did not provide specific responses to the generic letters. Of the 792 comments submitted, we received two comment letters with substantive comments, one for the Humane Society United States (HSUS) and, the Marine Mammal Commission (Commission). While some of the comments received from the HSUS and the Commission on the state's application touched on topics similar to previous comments received on past section 120 applications (Bonneville Dam): HSUS (March 3, 2007; February 19, 2008; October 12, 2011; and April 27, 2016) and the Commission (April 2, 2007; November 23, 2007; October 11, 2011; and May 6, 2016), and have been previously addressed by NMFS, some of the comments in their comment letters were unique to the state's application. Therefore, we provide responses to the subset of the unique comments received from the HSUS and the Commission on the state's application. Even though we focus our responses on these subset of comments, all 792 public comments received on the state's application were taken into consideration as part of the MMPA decision-making process.

The Humane Society of the United States

Comment 1: The Federal Register Notice Misrepresents the Proposed Action Offered for Comment (p. 2).

As an initial matter, we must point out that there is a major inconsistency between the state's application and the NMFS announcement regarding number of CSLs proposed to be killed under this permit if it is issued. We note that the Federal Register notice stipulates Annual removals under the proposed action are expected to be less than 0.5 percent of the Potential Biological Removal (PBR) level for [California sea lion] CSLs (current PBR level is 9,200 animals out of an estimated population of 296,740)." However the state's Section 120 application, referenced in this Federal Register notice, states "annual removals will be limited to no more than one percent of the CSL Potential Biological Removal (PBR) level." Thus, we are concerned that NMFS has not properly noticed the state's application, as is required by the MMPA, and may receive comments from individuals who misunderstand the impact of the state's proposed

action—or even that individuals may choose not to comment under the false impression that the impact on CSLs would be less than half of the actual proposed impact.

Response:

At the August 2018 Pinniped-Fishery Interaction Task Force (Task Force) meeting, we clarified that the reference in the Federal Register notice (FRN) regarding the statement—*annual removals under the proposed action are expected to be less than 0.5 percent of the PBR¹ level for CSL*—was meant to highlight the fact that even though the state is requesting to annually remove up to one percent of the PBR level for CSL, that based on the single-day maximum counts of CSL in the vicinity of Willamette Falls over the past four years [27 (2014), 32 (2015), 35 (2016), and 40 (2017)] (82 FR 52039), that not only is it likely that annual removals will be no more than one percent of the PBR level for CSL as proposed by the state in their application, but that, based on the single-day maximum counts of CSL for the years 2014 through 2017, it is reasonable to expect that annual removals will likely be less than 0.5 percent of the PBR level for CSL. Therefore, we disagree that there is an inconsistency between the state’s application and the FRN.

Comment 2: The Federal Register Notice Misrepresents the Proposed Action Offered for Comment (p. 2).

We are concerned that NMFS has not properly noticed the state’s application, as is required by the MMPA, and may receive comments from individuals who misunderstand the impact of the state’s proposed action—or even that individuals may choose not to comment under the false impression that the impact on CSLs would be less than half of the actual proposed impact.

Response:

On November 9, 2017, the FRN requesting comment on the state’s application was published. Therefore, the requirement to publish a notice in the Federal Register requesting comment on the state’s application as required by section 120(c)(1) of the MMPA has been fulfilled.

Comment 3: MMPA Section 120 Factors for Consideration Prior to Authorizing Lethal Take—Population Trends (p. 3).

The state’s assertions regarding the lack of historic presence of sea lions in the Columbia River or at Willamette Falls are factually incorrect.

¹ Potential Biological Removal (PBR) Level: defined by the Marine Mammal Protection Act as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. The current PBR for CSL is 9,200 animals.

Response:

Based on our review of the available evidence, we agree that “sea lions” were present in the Columbia River or in the vicinity of Willamette Falls historically. However, that same evidence is clear that “pinniped” presence in the Columbia River and the Willamette River, while within the historical range of CSL, were likely the exception, and was not, based on the available evidence, part of the core foraging areas for CSL. The overwhelming evidence suggest that the historical references to “pinnipeds or sea lions” were harbor seals, which is supported by the archeological and forensic evidence. We also agree that the recent (past 20-plus years) resurgence of California sea lions in the Columbia River is likely driven in large part to the availability, or lack thereof, of forage fishes due to oceanographic shifts in the California Current Ecosystem, as well as the status of the U.S. California sea lions population and behavioral adaptation.

Comment 4: Past efforts to nonlethally deter such pinnipeds, and whether the applicant has demonstrated that no feasible alternatives exist and that the applicant has taken all reasonable nonlethal steps without success (p. 7).

The applicant accounts for only 3 years of non-lethal deterrent use (2010, 2011 and 2013), with no documented use of non-lethal deterrence over the past 4+ years. And the applicant freely admits “[h]azing was discontinued after 2013 in order to shift the agency’s limited resources to a new monitoring effort,” citing Wright et al, which—we note—is a project that simply monitors the unmitigated predation. Nor does the state propose to undertake any non-lethal deterrence prior to adding animals to a possible list of individually identifiable animals to be lethally “removed.

Response:

In their application (p. 13) the state describes past efforts to nonlethally deter pinnipeds in the vicinity of Willamette Falls. These nonlethal efforts at Willamette Falls and elsewhere, e.g., Ballard Locks, Seattle, Washington; Bonneville Dam, have repeatedly demonstrated that nonlethal deterrence have, at best, limited or short term effectiveness in changing the behavior of pinnipeds or reducing pinniped predation on at-risk salmon and steelhead. It is clear from the information provided by the state in their application that past nonlethal deterrence efforts have been unsuccessful, and the state has demonstrated that no feasible and prudent alternatives exist.

Comment 5: The application misrepresents the conclusions of the Pinniped-Fishery Interaction Task for Bonneville Dam (p. 8).

Response:

We agree that the Task Force did not reach consensus to drop the requirement for hazing prior to adding an animal to the list for removal for the state’s MMPA section 120 authorization at Bonneville Dam. To clarify, we did note at the March 2017 Task Force meeting that the current

authorization at Bonneville Dam [Term and Condition 1(c)] requires the state's to haze (or other non-lethal deterrence) prior to adding a CSL to the removal list [Appendix 1].

Comment 6: MMPA Section 120(d)(3): The extent to which pinnipeds are causing undue impact to, or imbalance with, other species in the ecosystem, including fish populations (p. 9).

Status of the affected fish populations—the application acknowledges that ... the UWR steelhead risk of extinction was rated as “low to moderate.” The extinction risk for the UWR spring Chinook was rated at “low to very high” risk of extinction. There appears to be a logical disconnect between rating these runs [for purposes of an Endangered Species Act (ESA) risk analysis] and yet declaring that they are (in one case) possibly at a “very high” risk of extinction. This apparent discrepancy is not addressed.

Response:

The state's population viability analysis (PVA) was a new and independent analytical exercise and should not be confused with the extinction risk process used by NMFS to assess and determine the level of extinction risk for Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon under the ESA. The PVA is a subset of the extinction risk process we use to assess and determine the status of a species. We evaluate the biological status, which includes abundance, productivity, spatial structure and genetic diversity; threats and limiting factors; and we also consider discreteness and significance factors of a species as part of the overall extinction risk assessment. Therefore, we disagree that there is a logical disconnect between the agency's (NMFS) extinction risk process we follow under the ESA and the PVA conducted by the state.

Comment 7: Predation rates, impacts to UWR winter steelhead, and addressing predation as part of a comprehensive fish recovery strategy [and making a finding of significant negative impact on the decline or recovery of salmonid fishery stocks (p. 10-13).

While we understand that predation is the focus of this Application, it is worth noting that the decline of the salmon predates, and appears quite independent of, the predation ... In weighing the merits of the Application and making a finding that CSLs are having a “significant negative impact” on the decline or recovery of listed salmonids, NMFS must consider CSL predation rates in the context of other, often direr, reasons for a decline.

Response:

We agree that many factors, including pinniped predation, have led to the decline and are preventing the recovery of listed salmon and steelhead in the Willamette Basin, and while as a single action it is not sufficient to recover Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon, there is no single action available that will accomplish that goal. The data provided in the state's application regarding pinniped predation rates on Upper Willamette River winter steelhead and Upper Willamette River spring-run

Chinook salmon for the years 2014 through 2017 not only provides indisputable evidence that this source of mortality poses a significant negative impact on the recovery of Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon, but that the magnitude of pinniped predation may very well be the greatest impediment to recovery, especially on the Upper Willamette River winter steelhead distinct population segment.

Comment 8: Overlap with sea lions preying on salmon at Bonneville Dam and already targeted [authorized] for removal (p. 13).

The states of Oregon and Washington have mounted an aggressive program to brand over 3,000 sea lions in the Columbia River alone. We note that the state's current Application indicates that, during a 3 year study "a total of 39 of these branded animals were observed at Willamette Falls"; of these, over one half had also been observed at least once at Bonneville Dam, and one-quarter were already on the list for removal (or had been removed) under the states' MMPA Section 120 authority at Bonneville Dam. That is, a substantial number of the animals (at least 25%) are already on a NMFS-approved list for lethal removal, and the states' permit for Bonneville Dam does not restrict where or when they may be taken once added to the lethal list-- so the state already has authority to kill them if they are seen at the Falls. Given that there is considerable overlap in habitat use at the two choke points for the fish (i.e., Bonneville Dam and Willamette Falls), the state might well consider using their extant permit to "remove" the sea lions already authorized for lethal take for predation at Bonneville prior to requiring a new authorization.

Response:

The actual numbers of CSL authorized for removal on the state's MMPA section 120 authorization at Bonneville Dam that have also been observed in the vicinity of Willamette Falls is eight (8) animals. In 2018, the state did capture and remove (kill) a CSL (serial number: 267, brand U605) that was an animal on the state's MMPA section 120 removal list at Bonneville Dam [Appendix 1] and authorized for removal. As such, the state is using its existing MMPA section 120 authority to remove predatory CSL in the Willamette River. However, it is clear that the rate of pinniped predation on Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon, the fact that in 2017 40 CSL – the single-day maximum count - were documented in the vicinity of Willamette Falls, only eight (8) animals are authorized for removal under the state's MMPA section 120 authorization at Bonneville Dam, and that those CSL unique to the Willamette River, and are not authorized for removal, would continue to prey on Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon at rates similar to those provided in the state's application (p. 17), and would continue to pose a significant negative impact on the recovery of these salmonid fishery stocks.

Comment 9: Likelihood of Success of the Program in Eliminating Predation and/or Lowering the Salmonid Extinction Risk Is Far From Assured (p. 14).

In its most recent meeting in 2017, the Bonneville Dam Pinniped Interaction Task Force reached a unanimous conclusion that, despite years of authorization for lethal removal ... the removal program has not eliminated the problem interaction.”

Response:

We respectfully disagree with the premise. The removal of predatory CSL at Willamette Falls is expected to benefit Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon by decreasing predation and improving passage conditions (opportunity), and increasing the number (abundance) of adult Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon that reach their respective up-river spawning areas. What is unknown is the extent of the benefit. Without an authorized removal program that either eliminates or appreciably reduces pinniped predation on Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon in the vicinity of Willamette Falls, we believe that pinniped predation will persist at rates comparable to those detailed in the state’s application, and will not lead to improvements in passage conditions (opportunity) or increases in the number (abundance) of Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon.

Comment 10: Monitoring Plan (p. 14).

Also missing is a plan to monitor and report whether improvements in survival and recovery trajectory have resulted from a section 120 authorization in order to assure that this program will in fact improve survival probability for the fish and not just kill sea lions to no real purpose.

Response:

Should NMFS approve the state’s application, that authorization would include a requirement to monitor and evaluate the effectiveness of the removal program at Willamette Falls.

Comment 11: Significant Impact Criteria (p. 15).

In addition to assessing the MMPA Section 120(d) factors, prior to approving lethal removal of individually identifiable CSLs, NMFS must make an independent finding that those individuals are having a significant negative impact on the salmonid stock at issue. The application proposes two criteria for what qualifies an individual as having such an impact: the individual either must be observed eating one salmonid (of any type, whether of an endangered, threatened, or from a more robust stock) in the Willamette Falls area between November 1 and August 15 of any year, or the individual must be simply be seen in that area for any three days over a period of an indefinite number of years between November 1 and August 15 of any year. These proposed criteria do not require that the individual has even eaten a single Chinook or steelhead, let alone is having a significant impact on the decline or recovery of listed populations.

Response:

Based on the pinniped predation data provided in the state's application, the 17 years of pinniped predation data collected at Bonneville Dam, and our interpretation of the significant negative impact standard under section 120 of the MMPA, we have reached the conclusion² that collectively CSL are having a significant negative impact on at-risk salmonids in the Columbia River Basin. Based on this evidence, our interpretation of the significant negative impact standard under section 120 of the MMPA, and by extension, we conclude, that collectively CSL are having a significant negative impact on Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon in the vicinity of Willamette Falls. Therefore, we believe that the criteria proposed by the state in the application is justified and meets the significant negative impact standard under section 120 of the MMPA.

The Marine Mammal Commission

Comment 1: Number of Individual Sea Lions (p.2).

The Commission recommends that NMFS seek clarification from Oregon on the numbers of individual sea lions likely to be present at Willamette Falls in a given year and ask the Task Force to provide a recommendation on the appropriate annual number of removals to include in an authorization that is tailored to fit the scope of the problem.

Response:

At the August 2018 Pinniped-Fishery Interaction Task Force (Task Force) meeting, we clarified that the reference in the Federal Register notice (FRN) regarding the statement—*annual removals under the proposed action are expected to be less than 0.5 percent of the PBR³ level for CSL*—was meant to highlight the fact that even though the state is requesting to annually remove up to one percent of the PBR level for CSL, that based on the single-day maximum counts of CSL in the vicinity of Willamette Falls over the past four years [27 (2014), 32 (2015), 35 (2016), and 40 (2017)] (82 FR 52039), that not only is it likely that annual removals will be no more than one percent of the PBR level for CSL as proposed by the state in their application, but that, based on the single-day maximum counts of CSL for the years 2014 through 2017, it is reasonable to expect that annual removals will likely be less than 0.5 percent of the PBR level for CSL. Furthermore, we believe that the states' request to annually remove no more than one percent of the PBR level for CSL is appropriate to effectively manage the pinniped-fishery interaction at Willamette Falls.

² National Marine Fisheries Service Report on Consideration of Statutory Factors under Section 120 of the MMPA. March 2, 2012.

³ Potential Biological Removal (PBR) Level: defined by the Marine Mammal Protection Act as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. The current PBR for CSL is 9,200 animals.

Comment 2: Nonlethal Deterrence (p. 2).

The Commission notes significant differences between Oregon's current application and the authorization issued for Bonneville Dam with respect to the criteria for determining when an individually identifiable sea lion would qualify for removal. Foremost among these is the fact that the Bonneville Dam authorization includes three criteria and requires that all three be met. For Willamette Falls, Oregon proposes dropping the requirement that the sea lion remain in the area despite active non-lethal deterrence efforts, but more importantly, would require that only one of the other criteria be met. As such, the Commission recommends that NMFS seek additional information from the applicant concerning its rationale for the proposed criteria and ask the Task Force to review that information and provide a recommendation on whether using different criteria for identifying problem pinnipeds at Willamette Falls than apply at Bonneville Dam is justified.

Response:

Based on the pinniped predation data provided in the state's application, the 17 years of pinniped predation data collected at Bonneville Dam, and our interpretation of the significant negative impact standard under section 120 of the MMPA, we have reached the conclusion⁴ that collectively CSL are having a significant negative impact on at-risk salmonids in the Columbia River Basin. Based on this evidence, our interpretation of the significant negative impact standard under section 120 of the MMPA, and by extension, we conclude, that collectively CSL are having a significant negative impact on Upper Willamette River winter steelhead and Upper Willamette River spring-run Chinook salmon in the vicinity of Willamette Falls. Therefore, we believe that the criteria proposed by the state in the application is justified and meets the significant negative impact standard under section 120 of the MMPA.

Comment 3: Nonlethal Deterrence (p. 3).

The application submitted by Oregon also asks that there be no requirement to conduct any non-lethal deterrence activities as a condition of securing lethal removal authority at Willamette Falls. In support of this proposal, Oregon attached an appendix outlining the ineffectiveness of such methods. The Commission agrees that non-lethal methods have generally been ineffective in deterring predation by pinnipeds for more than short periods once those animals become established in a feeding area. However, naïve animals coming to Willamette Falls for the first time may be more susceptible to non-lethal methods. Once the currently established problem animals are identified and removed, non-lethal deterrence could play an important role in preventing new animals from replacing them, or at least slowing the rate at which replacements occur. This is a potentially important benefit of requiring non-lethal deterrence to continue, even if such measures do not appear to be very effective with animals after they are established in an

⁴ National Marine Fisheries Service Report on Consideration of Statutory Factors under Section 120 of the MMPA. March 2, 2012.

area. Although there is not enough information to draw any clear link, the Commission was struck by the fact that the occurrence of sea lions jumped markedly in 2013, after a lapse in non-lethal deterrence efforts in 2012. Perhaps a continuation of deterrence measures without such a gap would have prevented some of these animals from becoming established predators at Willamette Falls. The Commission recommends that NMFS consider the value of non-lethal deterrence, perhaps even farther downstream, to help prevent new sea lions from becoming established at Willamette Falls and ask the Task Force, in its deliberations, to look beyond the effectiveness of such measures on established animals.

Response:

In their application (p. 13) the state's describes past efforts to nonlethally deter pinnipeds in the vicinity of Willamette Falls. These nonlethal efforts at Willamette Falls and elsewhere, e.g., Ballard Locks, Seattle, Washington; Bonneville Dam, have repeatedly demonstrated that nonlethal deterrence have, at best, limited or short term effectiveness in changing the behavior of pinnipeds or reducing pinniped predation on at-risk salmon and steelhead. It is clear from the information provided by the state in their application that past nonlethal deterrence efforts have been unsuccessful, and we believe that the state has demonstrated that no feasible and prudent alternatives exist.

Comment 4: Haul-out Sites (p.3).

Another issue that is not well developed in the application is the impact of having sea lion haul-outs, primarily at Sportcraft Landing, in the proximity of the Willamette Falls. Presumably, the presence of such a haul-out facilitates sea lions becoming established and remaining in the area where they can take advantage of the congregation of salmonids at the falls. It would seem that eliminating or reducing the availability of haul-outs could be an effective means of lessening the attractiveness of the area or the number of sea lions it supports. The application notes that "numerous attempts to prevent animals from hauling out on docks at Sportcraft Landing were similarly unsuccessful," but does not discuss what attempts have been made or indicate why they have been unsuccessful. The Commission recommends that the applicant be required to provide additional details about these efforts and the constraints that are limiting their effectiveness and ask the Task Force to recommend additional steps that could be taken to reduce the availability of haul-out sites near the Falls.

Response:

As the state does not own the associated overwater infrastructure in the Willamette River, it does not have the authority to either eliminate or reduce haul-outs. Nonetheless, we agree that the state should, as part of a broader recovery effort, work with recovery implementation partners to reduce the square footage of overwater infrastructure used by pinnipeds as haul-out sites in the Willamette River.

Comment 5: Predation Rates (p. 4).

The assessment of predation rates across different years is confounded by inconsistent methodology. As noted on page 17 of the application, “sampling frames varied by year so annual predation estimates are not directly comparable across years without further assumptions.” The Commission recommends that, if removal authority is issued, it be conditioned to require standardized monitoring and reporting, so that trends in predation rates, and ultimately whether the removal program is effective, can be more clearly assessed.

Response:

Should NMFS approve the state’s application, that authorization would include a requirement to monitor and evaluate the effectiveness of the removal program at Willamette Falls.