



# MARINE MAMMAL COMMISSION

8 January 2018

Robert Anderson, Acting Branch Chief  
Protected Resources Division  
National Marine Fisheries Service  
1201 NE Lloyd Blvd., Suite 1100  
Portland, OR 97232

Re: NOAA–NMFS–2017–0126

Dear Mr. Anderson:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the 9 November 2017 *Federal Register* notice (82 Fed. Reg. 52039) requesting comments on the application from the State of Oregon seeking authorization under section 120 of the Marine Mammal Protection Act (MMPA) to remove, by lethal means, California sea lions in the Willamette River and announcing the National Marine Fisheries Service's (NMFS) decision to establish a Pinniped-Fishery Interaction Task Force (Task Force). The Commission also has reviewed the associated application submitted by the State. The Commission offers the following comments and recommendations.

The Commission concurs with NMFS's assessment that the application contains sufficient evidence of a pinniped-fishery interaction problem in the Willamette River to warrant establishing a Task Force under section 120 of the MMPA. As such, the primary focus of our comments is to identify issues that require additional information from the applicant and attention from the Task Force.

A key issue that has arisen with respect to authorized pinniped removals at Bonneville Dam on the Columbia River, is whether those removals translate into significant reductions in predation of salmonids or whether many of those fish are consumed by other sea lions that fairly quickly replace the animals being removed, with little net benefit to endangered and threatened salmonid populations. If pinniped removals are authorized in the area below Willamette Falls, a similar question is likely to arise. Therefore, the Task Force should be asked to make recommendations on how the monitoring and reporting requirements associated with a removal program can be structured to help to address this issue. Section 120(c)(5) of the MMPA requires the Task Force to evaluate the effectiveness of any authorized removals in eliminating problem interactions. Without information on whether and how quickly sea lions that have been removed are replaced, it will be difficult for the Task Force to assess the effectiveness of the removal program.

The rate at which individually identifiable sea lions feeding on salmonids are removed may also have a bearing on how quickly they are replaced and on how effective the removal program is in conserving threatened salmonids. In this regard, we note that the number of pinnipeds removed at

Bonneville Dam has been much lower than the authorized level. The Task Force should be asked to consider whether there is some minimum number of removals that needs to be reached in order for the program to be effective. If so, it should also be asked to consider whether the removal methods proposed by the State are likely to be effective in trapping enough problem pinnipeds or whether other removal methods need to be considered.

On a related point, data from Bonneville Dam indicate that not all sea lions that travel upriver to the dam are equal contributors to the predation problem. Some sea lions may appear only briefly and consume few salmonids and not return in subsequent years, while others become established, return year-after-year, and consume dozens of fish. As the Commission has observed in the past, an effective removal program should selectively target the sea lions that are the greatest contributors to the predation problem. The capture and euthanasia programs conducted at Bonneville Dam and apparently being proposed for the Willamette River are not selective in targeting the individual sea lions that consume the most fish. The Task Force should be asked to provide recommendations on whether alternative removal strategies and methods might be more effective.

As with the removal program at Bonneville Dam, Oregon is requesting authorization to remove up to one percent of the potential biological removal level of California sea lions (about 90 individuals) at Willamette Falls per year. However, as the application notes, there is considerable overlap between the individual sea lions observed at the two locations. As noted on page 10 of the application, more than half of the branded sea lions observed at Willamette Falls also have been observed at Bonneville Dam and one-quarter are already on the removal list based on their activity at Bonneville. Because of the overlap in the sea lions identified at the two locations, a smaller number of authorized takes may be sufficient to address the problem in the Willamette River. This is an issue that the Task Force should be asked to explore.

The number of sea lions authorized for removal in a given year should have some relationship to the maximum number of animals likely to meet the removal criteria, while retaining some cushion to respond to an unexpected influx of sea lions. Based on the information considered by Wright et al. 2016 (see page 9 of the application), the State estimates that a total of 48 different sea lions were present at Willamette Falls during the 2016 season. However, on page 11 of the application the State infers, without any additional explanation, that “as many as 100 [California sea lions] are responsible for predation on listed salmon and steelhead at the falls.” If, in fact, fewer than 50 animals are potentially contributing to the predation problem at Willamette Falls and, of those, one-quarter to over one-half already qualify for removal because of their presence at Bonneville Dam, authorizing a lower number of removals at Willamette Falls than requested by the State would seem more reasonable. In addition, if the proposed removal program proves to be effective, one would expect there to be a declining trend in the presence of sea lions at Willamette Falls. The Commission therefore 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.

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.<sup>1</sup> 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. To qualify for removal under the current Bonneville Dam authorization, a sea lion needs to be observed at the dam for a total of five days. In the application for the Willamette River, Oregon proposes to lower that requirement to three days of observed presence. Further, the period in which those observations are to be made extends for just five months at Bonneville, but would run for nine and a half months at Willamette Falls. Also, the removal criteria for Bonneville Dam apply to the area at (or above) the dam and a relatively confined “observation area” below the dam. The proposed criteria for the Willamette River would apply not only at the falls but downstream for about 4 kilometers to the confluence with the Clackamas River. There may be good reasons why the State is proposing to relax the criteria for designating individually identifiable sea lions subject to removal, but it is not apparent from the application. 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.

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 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.

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

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<sup>1</sup> The criteria require that the sea lion be (1) observed eating at least one salmonid in the observation area below the dam within a specified season, (2) observed at the dam for five or more days, *and* (3) be resighted at the dam despite active deterrence efforts.

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.

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.

One of the factors that the Task Force is to consider when reviewing an application under section 120 is the extent to which the pinnipeds are exhibiting behavior that presents an ongoing threat to public safety. The application presents generalized information on aggressive behavior by sea lions and the threats they pose to anglers. However, that information is not particular to the sea lions at Willamette Falls or the particular individuals that are the subject of the removal application. In fact, the one specific example cited in the application (see footnote 6) occurred many miles downstream from Willamette Falls in the Multnomah Channel. The Commission’s reading of section 120(d)(4) and its use of the phrase “such pinnipeds” is that any such threats would need to stem from the particular pinnipeds covered by the application. Absent a more direct link to these animals, this information is largely irrelevant to the deliberations of the Task Force.

NMFS specifically requested recommendations for potential members of the Task Force and noted that Oregon had appended to its application a list of suggested agencies and organizations. The Marine Mammal Commission was among the State’s suggestions. As it did when NMFS was forming the Bonneville Dam Task Force, the Commission believes that its appropriate role is as an independent external reviewer of the recommendations put forward by the Task Force, rather than as a member of the Task Force itself. Among other things, the deliberative process for formulating Commission recommendations set forth in the Marine Mammal Protection Act (MMPA), which requires consultation with its Committee of Scientific Advisors, is not conducive to the quick decision-making sometimes called for in the Task Force process. Rather, as it did with the Bonneville Dam Task Force, the Commission prefers to recommend suitable independent experts to serve on the Willamette Task Force in their individual capacities. Daryl Boness, who has served on the Bonneville Dam Task Force, would be a good choice, but as Chairman of the Commission is better reserved as a Commission decision-maker than as a Willamette Task Force member.

The Commission recommends two individuals for membership on the Task Force—Timothy J. Ragen, Ph.D., and Jason D. Baker, Ph.D. Both have a current or past association with the Commission, are pinniped specialists, are knowledgeable about the provisions of the MMPA, and reside in the Pacific Northwest. In addition, since they have not served previously on the Bonneville Dam Task Force, both would bring a fresh perspective to addressing the pinniped-fishery interaction problem in the Willamette River. Dr. Baker is employed by NMFS and we recommend that he be appointed in that capacity.

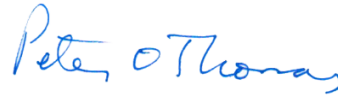
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The Commission appreciates the opportunity to provide comments on the State's application, the make-up of the Task Force, and the charge to the Task Force. Please contact me if you have questions concerning the Commission's comments and recommendations.

Sincerely,

A handwritten signature in blue ink that reads "Peter O. Thomas". The signature is written in a cursive style with a large initial "P" and "T".

Peter O. Thomas, Ph.D.

Executive Director