



# MARINE MAMMAL COMMISSION

18 October 2011

Donna Darm  
Assistant Regional Administrator  
Protected Resources Division  
National Marine Fisheries Service  
1201 NE Lloyd Boulevard, Suite 1100  
Portland, OR 97232

Dear Ms. Darm:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's 12 September 2011 *Federal Register* notice regarding the new application from Oregon, Washington, and Idaho seeking lethal removal authority for pinnipeds preying on endangered and threatened stocks of salmon and steelhead in the Columbia River. The Service is establishing a Pinniped-Fishery Interaction Task Force under section 120 of the Marine Mammal Protection Act to consider that application and provide its recommendations.

The Commission has commented on a similar application submitted previously by those states, on recommendations from the previous task force, and on the Service's environmental assessment on the proposed lethal taking authorization. Many of these comments remain germane and the Commission will not reiterate them here, but asks that they be made part of the record in your review of the current application. Rather, the following comments focus on a few important issues concerning the Service's review of the new application, particularly in light of the opinion issued by the United States Court of Appeals for the Ninth Circuit in *Humane Society of the United States v. Locke* on 23 November 2010 that invalidated the previous authorization.

## **The court's findings**

Section 120 allows the Service "to authorize the intentional lethal taking of individually identifiable pinnipeds which are having a significant negative impact on the decline or recovery of [certain] salmonid fishery stocks...." The appellate court's ruling focused on whether the Service had adequately supported its finding that the impact of predation by pinnipeds on salmonids at Bonneville Dam was significant. First, the court found that the Service had "not adequately explained its finding that sea lion predation is having a significant negative impact on salmonid decline or recovery in light of its positive environmental assessments of harvest plans having greater mortality impacts." Second, the court was troubled by the Service's lack of explanation for setting a predation rate of 1 percent as the dividing line between when pinnipeds were having significant versus insignificant impacts.

### **The meaning of significance and related criteria**

With respect to the first issue, the *Federal Register* notice suggests that the Service intends to address the court's concerns by differentiating the meaning of significance and related criteria under the various statutes rather than explaining how the Service's determinations under those statutes are consistent. The Commission appreciates that the three statutes at issue—the Marine Mammal Protection Act, the Endangered Species Act, and the National Environmental Policy Act—have somewhat different goals and policies. However, it is not convinced by the Service's discussion on pages 56170-56711 of the *Federal Register* notice that the standards under the three statutes are wholly unrelated.

The Commission is not suggesting that the determinations under those statutes need to be equated, but the similarities need to be recognized. For example, "jeopardize the continued existence of [a species]" under section 7 of the Endangered Species Act is defined by regulation (50 C.F.R. § 402.02) as engaging in an action "that reasonably would be expected...to reduce appreciably the likelihood of both the survival and recovery of a listed species..." Although phrased somewhat differently, this definition appears very close to the standard set forth in section 120—"having a significant negative impact on the decline or recovery of [listed] salmonid fishery stocks." The main difference is in the conjunction used (and vs. or), a distinction made largely irrelevant by the ruling in *National Wildlife Federation v. National Marine Fisheries Service*, 422 F.3d 1224 (9<sup>th</sup> Cir. 2007).

The Service draws other distinctions between section 7 and section 120, noting that the review under the Endangered Species Act looks at the effects of the proposed action combined with the effects of other activities. Under the Marine Mammal Protection Act the inquiry is limited to the effects of predation by pinnipeds on the affected stocks. Although this is a correct assessment of the standards under the two statutes, the conclusion drawn by the Service does not follow logically. Because section 7 consultations are to consider the broader effects of an action, including interrelated and interdependent actions, and the cumulative impacts of unrelated actions, it would seem that, if pinniped predation by itself were having significant negative impacts, a consultation looking at the full suite of activities (including predation by pinnipeds, predation by birds, fisheries, operation of the dam, etc.) would be more likely, not less likely, to reach a jeopardy conclusion.

The Service also seems to be drawing a distinction between the groups of animals that are the focus of the protections under section 7 and section 120. In this regard the Service notes that "[a]n action may not jeopardize the continued existence of a species or result in adverse modification of critical habitat, even though it has significant adverse effects to a listed individual or group of individuals." The Commission does not see how this is relevant in distinguishing between the Endangered Species Act and the Marine Mammal Protection Act standards. The provisions under both statutes are focused on effects at the stock or species (distinct population segment) level.

Drawing parallels between section 120 and the National Environmental Policy Act is a bit less straightforward because the regulations implementing the latter statute define "significantly" somewhat broadly to address the full scope of federal actions to which it

applies, not just those that may adversely affect endangered or threatened species. However, applying the “plain meaning” approach advocated by the Service, the Commission continues to be troubled that the Service can deem the impacts of predation by pinnipeds under the Marine Mammal Protection Act to be significant, while more numerous losses from other sources are determined not to be significant under the National Environmental Policy Act. As with the Endangered Species Act, the National Environmental Policy Act requires agencies to consider cumulative impacts. Thus, if one factor (pinniped predation) is considered to be significant, it follows that any additional removals of salmonids from other sources likewise would rise to a level of significance.

### **Alternative approaches for reconciling findings under the related statutes**

In light of the foregoing discussion, the Commission cautions the Service about relying too heavily on being able to distinguish between significance under section 120 of the Marine Mammal Protection Act and the standards applicable under the other statutes. Instead, the Service may be able to draw distinctions among the different sources of take by examining the levels and types of removals by each source and the overall impact on the status and trends of the affected salmonid stocks. For instance, because pinnipeds target adult salmon as they are returning to spawn, their take likely would have a different impact on the affected salmon stocks than a similar or greater number of removals from other age classes or at different times of the salmon’s life cycle. This may be a more compelling response to the Ninth’s Circuit’s ruling than trying to draw distinctions among the meanings and scopes of the three relevant statutes. It certainly would have a stronger biological basis.

Another possibility for reconciling the Service’s seemingly disparate findings under what appear to be similar standards under the relevant statutes would be to revisit the findings under the National Environmental Policy Act and the Endangered Species Act and bring them into conformance with the finding being made under the Marine Mammal Protection Act. Although more work would be involved, this approach would give the Service the opportunity to revisit its earlier analyses based on new information and changed circumstances—in this case, the continuing and growing predation of salmonids by California and Steller sea lions, which presumably was not accounted for fully in past environmental analyses and biological opinions. Because both the National Environmental Policy Act and section 7 of the Endangered Species Act require that cumulative impacts be considered, the increased removal of salmonids by pinnipeds is relevant to evaluating the significance of other sources of take.

The composition of the task force makes it somewhat ill-suited to conduct the type of review or provide the type of analysis needed to respond to the issues flagged by the appellate court. This being the case, it is not clear that the forthcoming task force meeting provides a useful opportunity to formulate guidance on why removals by pinnipeds are considered significant under the Marine Mammal Protection Act, while other removals are treated somewhat differently under other statutes. Nevertheless, the Service might usefully solicit the task force’s assistance on some of the matters discussed above, such as asking it to review the age classes of salmonids being removed by various sources and the timing of those removals.

### **Quantitative standards related to recovery goals**

The second issue identified by the Ninth Circuit also hinges on the measure of significance applied by the Service. To date, the task force and the Service have adopted largely qualitative standards. Predation at the current rate (observed levels of about 2-4 percent depending on run size) was considered significant by the majority of the task force and by the Service. In adopting a goal of reducing predation to 1 percent, at which time lethal removal would stop, the task force and the Service, at least implicitly, found that predation at this level would no longer be considered significant. However, this level was based primarily on a gut feeling of the task force members rather than any specific, quantitative relationship designed to meet the recovery goals of the Endangered Species Act.

Early in the Service's consideration of the previous application for lethal removal authority, the Commission recommended that the Service devise a quantitative standard for determining whether California sea lions are having a significant adverse impact on salmonid stocks. Although the Commission recognizes that the Marine Mammal Protection Act does not require the Service to quantify this standard, it continues to believe that there would be benefits in doing so. A standard that relates specific consumption rates (or numbers) to population level impacts on the affected fish stocks, such as a substantially increased risk of extinction or a marked delay in projected recovery time, would strengthen the Service's rationale for finding that predation by pinnipeds is significant and for authorizing removals of those animals. This would make the authorization more likely to withstand judicial scrutiny. In addition, undertaking the modeling necessary to develop a quantitative standard would give the Service an opportunity and a mechanism for comparing the relative impacts of different sources of salmonid mortality.

### **Targeting specific sea lions**

In commenting on the previous task force report, the Commission recommended that the Service structure the taking authorization to require the states to give priority to targeting the sea lions that are the greatest contributors to the predation problem. This would likely provide the largest reduction in salmonid predation while minimizing the number of sea lions that need to be killed. In addition, it would give the Service and the states an opportunity to determine whether, in removing the biggest consumers of salmonids, predation is markedly reduced or whether other sea lions fill the vacated niche and increase their consumption.

The need to target specific individuals is borne out by some of the information contained in the new application submitted by the states. Although the number of California sea lions present at the dam has declined somewhat since 2003 and 2004, the number of salmonids being consumed has risen. Based on the data presented in Table 5 of the application, in 2009 and again in 2010, a single sea lion was responsible for nearly 4 percent of the predation. Based on the data in the field report prepared by the Army Corps of Engineers for 2011, one sea lion accounted for nearly 5 percent of the reported salmonid consumption this spring.


Because of logistical and other considerations, Washington and Oregon have relied on traps to capture sea lions below Bonneville Dam before marking new animals or euthanizing those individuals on the list of sea lions authorized for removal. This is not a very selective process and does not meet the goal of targeting the largest contributors to the predation problem first. Therefore, the Commission believes that the task force and the Service, in reviewing the new application, should consider ways in which the selection process for removals could be improved.

### **Alternatives to section 120**

The Commission also has lingering concerns about whether section 120 of the Marine Mammal Protection Act provides an effective mechanism for addressing the predation problem at Bonneville Dam. At the heart of this concern is whether, as animals are removed, new ones merely take their place, resulting in little overall impact on the number of salmonids being consumed. Of the 48 identifiable California sea lions observed at the dam in 2011, more than a third (17) were new additions to the catalogue. In 2010, 65 percent of the identifiable sea lions were new to the catalogue. On the other hand, the number of sea lions observed at the dam and the estimated consumption of salmonids by California sea lions both declined in 2011. Although some may speculate that this is a result of pinniped removals over the past three years, there are too many confounding factors to draw this conclusion at this stage. Among these are the increasing presence of Steller sea lions at the dam, which may be displacing California sea lions, and inter-annual variations in climatic conditions (e.g., El Niño events) and the size of fish runs, which may affect sea lion distribution or the availability of food at other sites. The Commission encourages the Corps of Engineers, the states, and the Service to continue to collect the types of information needed to evaluate the effectiveness of the removal program, if a new authorization is issued. If it appears that the constraints imposed by section 120—e.g., targeting only individually identifiable pinnipeds that are contributing significantly to salmonid predation—are undermining the effectiveness of the removal program in stemming predation, the Service and/or the states might want to consider other management options available under the Marine Mammal Protection Act, including a waiver of the Act's moratorium on taking marine mammals or the return of management authority to the states.

Please contact me if you wish to discuss any of these matters in more detail.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Goren for".

Timothy J. Ragen, Ph.D.  
Executive Director