



MARINE MAMMAL COMMISSION

27 February 2017

James W. Balsiger, Ph.D.
Regional Administrator
National Marine Fisheries Service, Alaska Region
P.O. Box 21668
Juneau, AK 99802-1668

Dear Dr. Balsiger:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's Draft Supplemental Environmental Impact Statement (SEIS) that considers possible changes to regulations governing the subsistence harvest of northern fur seals on St. Paul Island, Alaska. The Commission has commented previously on such revisions, first in a [24 August 2012 letter](#) on the changes being sought by the Pribilof Island Community of St. Paul Island and the Aleut Community of St. Paul Island-Tribal Government and then in a [27 August 2015 letter](#) on the scope of this SEIS. The comments and recommendations in those letters should be considered in conjunction with the comments and recommendations provided in this letter.

Need for regulations

As noted in section 2.1.1 of the SEIS, there is a need for some type of regulatory authorization to allow the taking of fur seals for subsistence on the Pribilof Islands under the Fur Seal Act (FSA). This is reflected in the alternatives being considered, all of which have some regulatory component. However, some of the alternatives being considered, to varying degrees, eschew regulations in favor of "Co-Management Conservation Control." Both of these approaches to managing the fur seal subsistence harvest have advantages and disadvantages. For example, regulations provide greater assurance that particular provisions will be retained and that the public will be notified and have an opportunity to comment on proposed management measures and any subsequent revisions. On the downside, revising regulations can be a cumbersome process. As noted in the SEIS, a co-management approach provides greater flexibility to adapt to changing circumstances and make seasonal adjustments, but provides little assurance to anyone other than the parties to such agreements that important provisions are adopted or retained. Based on the description in the SEIS, it is not clear that the process for negotiating co-management agreements will be transparent or that the contents of those agreements will be made public. This should be clarified in the final SEIS.

While the Commission supports cooperative efforts under section 119 of the MMPA for NMFS and Alaska Native organizations to develop agreements to conserve marine mammals and provide for co-management of subsistence use, we think that some aspects of harvest or hunting¹

¹ Throughout this letter we follow the distinction between harvesting and hunting noted in the definition of those terms provided in Appendix A of the SEIS. That is, "harvesting" refers to the organized herding and driving of groups of seals

management need to be captured in regulations. This would ensure that measures necessary for conservation are developed with full public participation and have the force of law. To some extent, this is captured in the alternatives included in the SEIS, which all include regulatory provisions that limit the overall annual taking and delineate harvesting and hunting seasons. The Commission believes that setting a limit on the allowable annual mortality of female fur seals is also important and recommends that it such a limit be included in the regulations. Similarly, the Commission believes it would be good practice in every instance for those engaged in harvesting pups to establish affirmatively that a seal is a male before being allowed to kill it. As such, there is no need to have the co-management council exercise discretion as to whether this should be required. The Commission therefore recommends that, as with the pup harvest on St George Island (see 50 C.F.R. § 216.72(d) (8)), harvesting methods, including verification in advance that harvested pups are males, be included in the regulations, subject to a similar provision that deviations from those practices are permissible if NMFS, in consultation with the individuals conducting such harvest, determine that alternative methods will not result in undue stress to seals, increased disturbance of resting seals, or greater risk of accidentally harvesting female seals.

The Commission further recommends that regulations be used to establish limits on how the discretion of the co-management council can be exercised. For example, under alternative 2, the frequency with which rookeries and haulouts could be visited by harvesters/hunters would be left entirely to the discretion of the co-management council, based on community need and environmental conditions. That discretion could be exercised to provide either more restrictive or more lenient management than would be the case under the regulatory approaches reflected under the other alternatives. As noted in the discussion at 4.2.1.1, NMFS is not contemplating unlimited harvests under any of the alternatives and, it is “practically...not possible [using volunteer harvesters]...that harvests could occur more frequently than once or twice a week...” This being the case, setting some regulatory limit on the number of times a haulout could be subject to harvest each week (e.g., once or twice) does not seem like an overly burdensome requirement and would give added assurance that, as NMFS anticipates, unlimited harvests are not authorized. In this same vein, if NMFS decides to take the minimalist approach to regulating subsistence taking, as reflected under alternative 2, it should set forth in regulations the goals that the co-management program should be pursuing. Those goals should include minimizing: (1) the removal of females, (2) impacts on seals within specific areas (e.g., rookeries and haulouts) by spreading out harvests across those areas, (3) disturbance and harm to non-harvested seals, and (4) the number of intrusions into rookeries for harvests.

Interplay between the FSA and the Marine Mammal Protection Act (MMPA)

The discussion of management under the FSA and the MMPA in the SEIS (section 3.9.4.1) concludes with the statement that “It is clear from intent that the co-management process established under Section 119 of the MMPA should now be the sole authority to govern the subsistence takes of the depleted stock of northern fur seals on the Pribilof Islands.” The Commission disagrees with this assessment. There is nothing in section 119 or its legislative history that suggests any intention that this generally applicable provision should override the more specific requirements of the FSA, which, as noted above, include provisions for regulating the subsistence

from hauling grounds to inland areas where the seals are stunned and exsanguinated. “Hunting” refers to the taking of seals using firearms.

harvest of fur seals on the Pribilof Islands. Moreover, as demonstrated by the inadequacy of section 119 to provide authority for stemming the overharvest of Cook Inlet beluga whales (to the point where the stock warranted listing as endangered under the Endangered Species Act), section 119 lacks the teeth necessary to establish enforceable harvest limits. In response to the demonstrated inadequacy of section 119 agreements for harvest management, Alaska Native representatives and staff from NMFS, the Fish and Wildlife Service, and the Commission developed what was referred to as “section 119A,” proposed legislation that would have provided co-managers authority to regulate subsistence harvest jointly without having to make a depletion finding or adopt regulations under section 101(b) of the MMPA. However, Congress declined to enact that proposal. Given this history, it is difficult to discern any intent on the part of Congress that co-management under section 119 of the MMPA should be viewed as the sole authority for governing subsistence takes, particularly for northern fur seals.

Reliance on PBR to evaluate impacts

Crucial parts of the analyses in section 4 of the SEIS assess the impacts of various types of removals relative to the fur seal stock’s potential biological removal (PBR) level. NMFS has compared the anticipated removals with the applicable PBR, which for the St. Paul Island component of the stock is given as 10,386. Removing less than 10 percent of PBR is considered to have a negligible impact and up to 30 percent a minor impact. Between 30 and 50 percent would be considered as having a moderate impact, and over 50 percent a major impact. Thus, under all of the proposed alternatives that would cap removals at 2,000 seals, the impacts are viewed as being negligible or minor.

In this case, NMFS seems to be focusing on the details of the PBR analysis, rather than the principle underlying the concept. The discussion in the SEIS accurately portrays how PBR has been calculated in the applicable stock assessment report, apports that number to St. Paul, and applies the significance thresholds it has applied in other contexts. However, it ignores the basic premise underlying the PBR concept. As explained in section 4.2.1 of the SEIS, PBR is defined under the MMPA 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.” In this case, the fur seal stock was designated as depleted in 1988 because NMFS determined that the population was below its optimum sustainable level. As reflected in Figure 3.2.1 of the SEIS, the stock has been declining more or less continuously ever since. Although the Commission is not suggesting that taking fur seals for subsistence purposes has been the cause of the observed decline or even a major contributing factor, we believe that relying solely on a PBR analysis to assess the significance of removals is misguided given that the principle behind the PBR concept—that a population will increase and eventually achieve its optimum sustainable population level if removals are kept below PBR— is not being met in this instance. Even at the fairly low levels of removals of seals for subsistence on St. Paul over the past decade (about 350 per year between 2005 and 2016), the population has been declining by more than 4 percent per year since the late 1990s. Given this situation, it is not clear that strict reliance on the PBR approach for assessing the impacts of various removal levels is consistent with the underlying principle of that approach or with the mandate of section 2 of the MMPA to replenish depleted populations to their optimum sustainable population levels. Rather, an approach that assesses the impact of losses to the population from subsistence harvests/hunts *in addition to the population decline that already is occurring and that may continue to occur* is more appropriate given the status and trend of the population.

Takes of female seals

In its previous comments on the regulatory changes sought by St. Paul, the Commission has stressed the need to avoid, or at least minimize, killing female seals. Fur seals on St. Paul are from a depleted stock that is undergoing a prolonged and pronounced decline that is attributed largely to declining pup production. Clearly, recruiting breeding females to the population is crucial to the stock's recovery. Stopping and reversing the decline is important not only for the conservation of fur seals, but for the perpetuation of the subsistence cultures that rely on them.

The alternatives presented in the SEIS all include provisions that seek to avoid taking, and that set some limit on taking, female seals. The preferred alternative would cap accidental mortality of female seals at 20 per year and alternative 5 would set that limit at 200, the highest level considered. The SEIS cites a paper by Towell and Williams for its conclusion in section 4.3.6.3 that taking as many as 20 female seals a year would result in less than a one percent reduction in production or female population size and that taking at this level would have undetectable impacts on the population. The SEIS notes elsewhere (section 4.3.3.1) that accidental female mortality of up to 200 seals would result in less than a two percent loss of females to the population and likewise would be undetectable.

The Literature Cited section of the SEIS (section 7) omits any reference to publications by Towell and Williams, although two different citations are included in the text (Towell and Williams (2016) and Towel and Williams (NMFS unpublished)). It is unclear whether these are two different publications or inconsistent citations for the same publication. This should be clarified and the relevant paper(s) made available to those reviewing and commenting on the SEIS and on the appropriate agency website.

The Commission is concerned that the SEIS relies on the conclusions of Towell and Williams regarding the effects of removing female seals without any discussion of the analyses behind those conclusions. This lack of explanation is exacerbated by the confusion over what study or studies the agency is relying on and by the associated difficulty that reviewers might have finding the source material. The potential effect of taking female seals is an important issue identified in the Commission's scoping comments and warrants more than summary conclusions. The Commission therefore recommends that NMFS, in the final SEIS and any proposed rule, provide a sufficient rationale for conclusions regarding the effect of taking of females on the fur seal population, as well as the necessary context for evaluating such conclusions. In this regard, NMFS should summarize the analyses of Towell and Williams, the assumptions underlying those analyses, and any caveats noted by the authors, and relate those analyses directly to the alternatives being evaluated by the agency.

Even if the taking of 20 female seals, as proposed in the preferred alternative, would have only a small impact on the population, efforts should be made to minimize any such taking to the maximum extent practicable while allowing sufficient subsistence opportunities to Alaska Natives on St. Paul. The Commission agrees with NMFS that, because of the distribution of fur seals in the winter and spring months, there is a low risk that female seals will be taken in the proposed January-May hunting season. However, authorized hunting in these months is unprecedented and there is limited information regarding the numbers, age classes, distribution and sex of seals using the island

and nearshore waters during January through May. Thus, the Commission recommends that NMFS and its co-management partner, as part of this alternative, commit to continue monitoring migratory patterns of fur seals, collect information on fur seals present on and around St. Paul Island during this period and adjust the winter-spring hunt accordingly. The proposed hunting methods are not particularly selective and, if female seals are more prevalent than believed or begin to show up in greater numbers during these months (e.g., in response to environmental changes), the winter-spring hunt will need to be re-assessed.

As noted in the SEIS, closing the season for harvesting sub-adult males on August 8 has been fairly effective in minimizing the accidental taking of female seals. In the two instances when the harvest was extended beyond that date, unacceptably high numbers of female seals were taken, causing the harvest to be terminated for the remainder of the year. This prompted NMFS, in 1992, to amend the harvest regulations to eliminate the extension provision altogether. Despite this history, and the demonstrated difficulty of even experienced sealers to be able to differentiate between sub-adult males and females once they begin to come in, the preferred alternative would allow sub-adult seals to be harvested any time between June 23 and December 31. We are also struck by the numbers of female seals taken on the days when the harvest was extended beyond August 8. On a single harvest-day in September 1986, 16 of the seals taken (out of a total of 71, we believe) were females. This shows not only that there is a significant risk of taking sub-adult female seals during the proposed harvest season, but that the cap on the taking of females, which would foreclose harvest opportunities for the remainder of the year, could be reached quickly, even in a single day. Given the demonstrated risk of taking females after August 8, the likelihood that less experienced sealers (who would be participating in the harvest under the preferred alternative) would be less able to differentiate between male and female seals, and the implications for shutting down further harvests that year, the Commission recommends that allowing sub-adult fur seals to be harvested after this date be viewed as a “last resort” alternative that should be pursued only if subsistence needs cannot be met in any other way. In this regard, the seasonal approaches reflected under alternatives 3 and 4 that provide separate seasons for taking sub-adult seals and pups (including some combination of the two) are preferable to alternative 2.

Unlike sub-adult fur seals, pups are more easily handled and can be sexed before they are harvested. As demonstrated by three years of experience harvesting pups on St. George, the risk of accidentally killing female pups can be eliminated or reduced to a very low level by having two people confirm that a seal is a male before it is killed and releasing all female seals and those that cannot be affirmatively identified as male. As noted above, the Commission recommends that practices similar to those adopted for the harvest of pups on St. George be included as part of any regulations authorizing the harvest of pups on St. Paul.

Taking males up to seven years of age

The proposal to allow juvenile male seals (those up to 7 years old, excluding pups) to be harvested in addition to pups and sub-adult seals (those less than 124.5 cm – i.e., those between 2-5 years of age) is not adequately explained or analyzed in the SEIS. The Commission can understand why these larger seals might be targeted during the proposed January to May hunts—they may be the only seals available. However, there is nothing in the SEIS that indicates they are a preferred food source or that subsistence needs during the period from June through December cannot be met by harvesting sub-adults and pups. There may be a good reason for the proposed change but, if

so, it does not appear to be described anywhere in the SEIS. Likewise, there is no analysis of how expanding the age classes and sizes of seals that may be harvested would affect harvesting methods, disturbance to rookeries and haul outs, the humaneness of the hunt, or the risk of accidentally taking females, or have other possible effects. As noted in section 4.2.1 of the SEIS, “any increase in human-caused mortality for age classes approaching sexual maturity is more likely to cause a detectable reduction in population abundance versus human-caused mortality during the first year of life.” As such, the SEIS should provide some rationale for the proposal to allow harvest of these older age classes, whose removal is likely to have more significant impacts on the population. The Commission therefore recommends that, before proceeding with a proposal to expand the age classes of seals that may be harvested between June and December, NMFS provide a detailed analysis of the reasons for and the potential consequences of such a change.

January-May hunting season and use of firearms

There currently seems to be a low risk of taking female seals during the proposed hunting season. Also, because seals occur only sporadically at St. Paul Island during this period and in fairly low numbers, there does not seem to be a big concern about the disturbance of seals from the use of firearms early in the proposed hunting season. However, as the season progresses, male seals begin to arrive on St. Paul Island with greater frequency and start to occupy established breeding sites, thus disturbance from the use of firearms would become a greater concern later in the proposed hunting season. The Commission’s primary concern relates to the potential for struck and lost seals. Based upon data from Steller sea lion hunts, NMFS speculates that struck and lost rates from the proposed hunt of fur seals could range from 9 to 50 percent, or perhaps even higher, because, as noted in section 4.2.5 of the SEIS, these events may be under-reported. In any event, the loss rate during the proposed hunt is likely to be much higher than for the proposed harvests.

One of the elements of “wasteful take” identified in the 1986 fur seal harvest regulations is employing harvest methods that are not likely to ensure successful killing and retrieval of each selected fur seal. In comparison to the existing and proposed harvest methods, the proposed hunt is much more likely to result in killing seals that are not retrieved. On the other hand, the hunt appears to be the preferred method of securing fresh seal meat during this time of the year. However, this is an issue where additional limitations could further reduce the likelihood that seals will be struck and lost. Although the SEIS notes that shooting marine mammals from vessels on the water, even in calm seas, can be unsteady, and that most if not all hunting would be done from land, alternative 2 would allow the hunting of fur seals from vessels. Similarly, NMFS and its co-management partners should assess whether retrieval rates for seals shot when in the water are significantly different than those for seals shot when hauled out and adjust hunting practices accordingly.

As noted in the SEIS, there is no direct experience of hunting fur seals with firearms on the Pribilof Islands from which to assess struck and lost rates or design measures aimed at reducing those rates. As such, it is particularly important that these hunts, if authorized, be monitored closely by NMFS, in collaboration with its co-management partners, at least at the outset, to collect information necessary to understand and reduce struck and lost incidents, including details concerning the conditions under which they occurred and the ages and distribution of animals available to hunters.

Rookeries

As discussed elsewhere, harvests should be rotated among areas to avoid overharvesting any of the rookeries and the number of entries to rookeries by harvesting groups should be controlled to minimize disturbance. As we interpret Table 4.2.1, NMFS anticipates that under the preferred alternative there would be 137 harvest events during the proposed harvest season. The accompanying analysis indicates that 2 pups and 1.15 non-pups would be disturbed for each pup harvested and that 60 additional pups and 50 additional older animals would be disturbed for each harvest event. The Commission believes that these estimates of disturbance are low and that actual numbers could be considerably higher if round-ups are conducted at rookery areas where a large number of mothers and pups are adjacent to the harvest area and can see or smell the harvesters. In addition, experience from research activities conducted on St. Paul over the years indicates that, over time, repeated entries into rookeries make seals more wary and responsive to the mere scents and sight of humans. Thus, it seems that as the season progresses, more seals could be disturbed than predicted. The Commission is also concerned that, if the projected number of harvest events were to occur, there would be an unprecedented level of activity and disturbance of seals in those rookeries. Efforts should be taken to lower the allowed number of harvest events by consolidating harvest activities to the extent possible. Because the number of entries to the rookeries and the potential for cumulative effects from disturbance could be at historically high levels, the Commission recommends that NMFS provide further discussion of its plans for monitoring the impacts from the proposed harvest scheme if the preferred alternative is adopted.

More detailed discussion of the assumed number of harvest events and how these relate to the predicted disturbance levels is also needed. Among other things, NMFS should explain what constitutes a harvest event and how it arrived at the estimates of disturbance associated with each event and with each harvested seal. It also is not clear how the “family-style” organization of the harvest factors into those estimates. More detail is needed as to how family-style harvests would be conducted—e.g., how many people/families are involved, would families act independently or coordinate their efforts, would different groups enter a rookery on the same day and, if so, would those be counted as single or multiple harvest events?

Subsistence needs

As with the management of subsistence whaling under the auspices of the International Whaling Commission, harvest levels should reflect two components—whether the population can sustain a particular harvest level and the subsistence needs of the users. The SEIS is not very informative on this second prong. The SEIS provides some information on subsistence use of fur seals and other food sources on St. Paul Island, but fails to address the basic question posed by the Commission in its scoping comments, which was prompted primarily by the discrepancy between the identified need and recent harvest patterns. We appreciate that residents of St. Paul rely on a variety of subsistence resources and store-bought foods and that the mix among those sources varies seasonally and from year to year, perhaps increasingly so under changing environmental and economic conditions. We also appreciate that some cushion is needed to ensure that subsistence users are not constantly up against the harvest limit. Further, the change from a harvest of exclusively sub-adult males to one focused also on pups likely means that more seals will have to be taken to satisfy the same subsistence needs. Given that each alternative other than the no-action alternative would set a harvest limit by regulation that is at the upper end of the currently established

range or higher and would eliminate the requirement for that limit to be reviewed periodically, a more rigorous analysis is needed. The Commission recommends that NMFS provide a more rigorous analysis of subsistence needs, to include, at a minimum—

- why NMFS believes that subsistence needs are more than five times higher than the average number of seals harvested per year on St. Paul over the past 15 years,
- how the envisioned switch from harvesting sub-adult males to mostly pups is expected to change the yield of meat per seal,
- whether St. Paul residents have been foregoing the opportunity to stockpile meat during the current harvest season for use later in the year and, if so, why this might be the case, and
- how any shortfalls in the availability of seal meat may have been offset by greater reliance on other subsistence species (i.e., are data available that show corresponding trends in these other harvests?).

Also, the proposed initial harvest limit under alternative 5 (4,900 seals) deviates so much from recent harvest use patterns and assessments of estimated subsistence needs that NMFS should note that this component of the alternative is included for illustrative purposes only and to ensure that a sufficiently broad range of alternatives is considered to satisfy requirements under the National Environmental Policy Act.

On a related point, the SEIS does not provide information about recent fur seal harvests on St. Paul in a user-friendly format. That information is included in Figure 4.3-1 but at a scale that makes it difficult to discern harvest patterns and trends since the inception of the subsistence harvest in the 1980s. Harvest data, including the numbers of female seals accidentally taken, should be presented in tabular form along the lines of those provided for pup harvests in the 1800s (Table 3.9-3) or subsistence takes of Steller sea lions (Table 4.2-3).

The Commission hopes that these comments and recommendations are helpful to NMFS as it evaluates the alternatives considered in the SEIS and whether to propose changes to the current subsistence harvest regulations. Please contact me if you would like to discuss or have any questions concerning the points raised in this letter.

Sincerely,

A handwritten signature in blue ink that reads "Rebecca J. Lent".

Rebecca J. Lent, Ph.D.
Executive Director