31 July 2015

Mr. William W. Stelle, Jr. Regional Administrator 7600 Sand Point Way NE, Building 1 Seattle, WA 98115-0070

Dear Mr. Stelle:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Draft Environmental Impact Statement (DEIS) prepared by the National Marine Fisheries Service (NMFS) in response to the request by the Makah Tribe (the Tribe) to resume hunting gray whales. In its review, the Commission has considered the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA) and offers the following comments and recommendations.

The Commission believes that the DEIS meets the requirements of the National Environmental Policy Act (NEPA) and responds to the major points raised in its 27 August 2012 letter concerning the Notice of Intent to prepare the DEIS. While the DEIS took considerable time to prepare, the Commission recognizes the extensive efforts made by NMFS to solicit input from the Tribe and from the public, and the careful attention given to describing the affected environment. The range of Alternatives analyzed in the DEIS is sufficient for the needs of NEPA, although the Commission notes that NMFS did not consider Alternatives that would authorize the take of more whales than under the Alternative proposed by the Tribe or apportioned to the United States under the catch limit adopted by the International Whaling Commission (IWC). The Commission agrees that there is little need for the EIS to consider higher take levels than are being sought or than are allowed under international law, but doing so could help decision-makers assess the relative impacts of the requested take level against other possible removal levels. Overall, the DEIS provides scientific, socio-economic, cultural, and other relevant information to help NMFS draft the proposed rule, and to inform parties to the rulemaking and others as they develop input on the six Alternatives considered and on other possible Alternatives as part of the regulatory process.

Background

The Makah Tribe submitted a request to NMFS in February 2005 seeking authorization under the MMPA to resume treaty-based hunting of eastern North Pacific (ENP) gray whales (*Eschrichtius robustus*) for ceremonial and subsistence purposes in the coastal portion of the Tribe's usual and accustomed (U&A) hunting and fishing area. NMFS prepared the 2015 DEIS to analyze various Alternatives, including the Tribe's proposed action (Alternative 2), and to consider the impacts on gray whales, including the ENP stock, the Pacific Coast Feeding Group (PCFG), and the western North Pacific (WNP) stock. In addition, the DEIS considers the potential impacts on marine waters, pelagic and benthic species, other protected species, and numerous aspects of the human environment.

NMFS has thus far refrained from recognizing the PCFG gray whales as a separate population stock under the MMPA. However, the agency has calculated the Potential Biological Removal (PBR) level for this group of whales in the most recent Pacific Stock Assessment Reports (Carretta et al. 2015) and, in view of the uncertainty about these whales' population status, the DEIS has chosen to treat the PCFG as a stock for the purpose of the rulemaking. The Commission agrees with this precautionary approach. Similarly, the present state of understanding of gray whale movements and population structure throughout the North Pacific does not allow a definitive answer to the question of how the whales that migrate from East Asia to North America should be classified or categorized. A recent analysis for the IWC Scientific Committee concluded that more than a third (possibly many more than a third) of the gray whales that feed in summer off Sakhalin Island, Russia, migrate to North America in the autumn and likely overwinter in the Mexican breeding grounds along with the ENP stock before returning to Russia in the spring (IWC in press). The Sakhalin feeding group nevertheless shows very strong site fidelity to feeding areas in Russia, and genetic studies using both mitochondrial and nuclear markers have demonstrated significant differentiation between Sakhalin gray whales and ENP gray whales (Leduc et al. 2002; Lang et al. 2011; Weller et al. 2012). Therefore, until understanding improves, the Commission considers it appropriate for NMFS to treat these trans-oceanic migrants as a separate unit to conserve. In other words, WNP gray whales should effectively be treated as a stock for the purposes of assessment and management in the United States, and this is the approach being taken by NMFS in its Stock Assessment Reports as well as this DEIS.

The Makah's request describes the history of whaling by the Tribe, noting that whaling began at least 1,500 years ago and was central to the Makah way of life until the early 20th century. Whaling contributed to the Tribe's subsistence needs and helped to shape and maintain social and cultural functions. The importance of whaling to the Tribe was reflected in the wording of the 1855 Treaty of Neah Bay, which explicitly reserves the Tribe's whaling rights – the only treaty with a U.S. tribe that does so. While the Tribe's engagement in whaling declined over the past century due to many factors – most of them beyond the Tribe's control – whaling remains a big part of the Makah's self-identity and traditions. The Commission notes that Tribal representatives have worked closely with the U.S. delegation to the IWC to ensure the recognition of Makah whaling as an aboriginal subsistence hunt. Moreover, the IWC has provided a catch limit (apportioned between Russia and the United States) so the Makah Tribe can take a small number of ENP gray whales.

Primary Concerns

In reviewing the Tribe's request, particularly as it relates to the MMPA's waiver requirements (Sections 101(a)(3)(A) and 103), the Commission is primarily interested in the following issues, in order of importance:

- 1) Risk of killing or injuring a WNP gray whale (although from a legal perspective all types of unauthorized take, not just killing or injuring a whale, are of concern);
- 2) Risk of having negative impacts on PCFG gray whales;
- 3) Ensuring that the ENP gray whale stock is at and remains within its optimum sustainable population; and
- 4) Balancing the Tribe's desire to use traditional hunting methods with the goals of achieving hunting efficiency and humaneness.

Analysis of Alternatives

The Commission's comments on each of the six Alternatives are presented below, focusing primarily on the four concerns noted above. Each of the Alternatives contains a number of elements that would have a bearing on these concerns, notably: (1) the timing and location of the hunt; (2) the cap on total take (primarily landings and strikes), including how that cap is apportioned between ENP and PCFG whales and the implications of taking a WNP whale; and (3) the hunting methods (e.g. type(s) of vessel, method(s) of propulsion, weapon(s) used). The Commission notes that the other potential impacts listed in the Summary Table ES-1 would be similar across all action Alternatives or be in proportion to the number of whales taken. The Commission provides its recommendations for the elements to be included in a final, preferred Alternative, based on review of the six Alternatives.

Alternative 1 - No Action Alternative

The No Action Alternative is basically the status quo, i.e., no hunting of gray whales by the Tribe would be allowed. As explained in the DEIS, the IWC has authorized, based on the *joint* request of the Russian Federation and the United States, a catch limit of 744 whales over the six-year period from 2013 to 2018, provided that no more than 140 whales are taken in any given year. Under a bilateral agreement, in the absence of a Makah gray whale hunt, or if the Makah hunt yields fewer whales than the number assigned to the United States, a transfer arrangement may be agreed such that the Chukotka Natives in Russia are allowed to take the "unused" portion of the U.S. allocation. Given the location of the Russian subsistence hunting, it is unlikely that any PCFG whales or WNP whales would be taken by Russia. However, there is a reasonable probability that the portion of the overall catch limit for ENP gray whales allocated to the United States would be harvested by Russia.

Alternative 1 would deny the Tribe's request for a waiver, therefore rendering the community unable to conduct its treaty-recognized, traditional subsistence hunting activities legally, and this would further erode the Tribe's spiritual and cultural connection to whaling. As noted in the DEIS, the Makah community's access to whale products would be limited to making use of drift (dead stranded) whales, to the extent that such use is allowed under applicable law. The cultural value of such usage would be limited given that the salvaging of drift whales is not a Makah traditional practice and is not the type of whaling right recognized in Article 4 of the Treaty of Neah Bay.

Alternative 2 - Makah Tribe's Proposal

Of the six Alternatives identified in the DEIS, Alternative 2 has the greatest potential impact on PCFG and WNP whales and therefore can be viewed as the least precautionary. A cap on the number of PCFG whales harvested (i.e. struck or landed) is based on a calculation of the PBR level for the PCFG, even though this group of whales is not yet formally recognized by NMFS as a separate stock. The PBR calculation in the Makah proposal uses a recovery factor of 1.0, which is less precautionary than the recovery factor of 0.5 used by NMFS in its most recent draft Stock Assessment Report owing to the uncertainty of whether the PCFG qualifies as a population stock under the MMPA and, if so, what its status is. While there is a cap on the number of whales that can be struck and lost (3 whales), these would not count against the PCFG cap. In addition, the PBR

calculation used to establish the PCFG cap does not reflect sources of human-caused mortality other than whaling (e.g. fishing, ship strikes). The resulting average allowable annual take of 4 PCFG whales (and up to 5 in one year) is the highest of any of the Alternatives. Given that the hunt under Alternative 2 would be conducted during a period that includes the times when WNP gray whales are most likely to migrate through the Makah U&A hunting area, this Alternative also has the highest estimated probability of interactions with WNP gray whales, with near certainty that at least one of them would be approached, and a probability of around 35 percent that an unsuccessful harpoon attempt on a WNP would be made over a six-year period.

The Commission believes that (a) the calculation used to determine a limit on removals should reflect the uncertainty surrounding the question of whether the PCFG is a population stock, (b) struck and lost whales, and the possibility that they are PCFG whales, should be accounted for in some way, and (c) all sources of human-caused injury and mortality should be considered in setting the cap for whaling.

The Tribe proposed that the hunt be conducted with a combination of traditional and "modern" methods, using canoes and motorized vessels as well as harpoons and high-powered rifles. When a whale is targeted for harvest, a Tribal hunter in a canoe would attempt the first strike using a stainless steel harpoon with a toggle point, which is secured to a rope with floats attached. This would be followed by a Tribal hunter on a motorized chase boat shooting the whale at close range with a high-powered, .50-caliber rifle. As noted in the DEIS, the .50-caliber rifle proposed by the Makah is more powerful than the .22 to .32-caliber rifles used by Chukotka Natives in Russia for hunting gray whales, and the .50-caliber rifle has been demonstrated to be effective in killing gray whales humanely. Alternative 3 (discussed below) proposes the use of a somewhat higher-caliber gun (0.577) than the .50-caliber rifle proposed by the Tribe. Although not included in the Makah proposal, the DEIS proposes in Alternatives 2 (as modified from the Makah proposal), 4, 5, and 6 the possible use of a hand-thrown darting gun or a shoulder gun to fire an explosive projectile into the whale (black powder or penthrite). The Commission believes that the .50-caliber rifle may be sufficient to address its concern that the hunting method strive to shorten the time to a whale's death, and avoid losing struck whales.

Alternative 3- Offshore Hunt

This Alternative is similar to Alternative 2, but differs in several respects. First, it would require whaling activities to be conducted further from shore, with initial strikes occurring at least 5 miles off shore. This proposed hunting-area restriction stems from public comment expressing concern about gun shots and other hunting operations occurring close to shore, possible disturbance of wildlife (including birds) on the shoreline and on rocks and islands, and impacts on PCFG whales, which tend to feed closer inshore. Alternative 3 is also more conservative (i.e., more risk-averse or precautionary – with regards to whale conservation) than Alternative 2 by establishing lower caps on the annual number of strikes (6 vs. 7), the annual number of struck and lost whales (2 vs. 3) allowed, and the number of PCFG whales that can be harvested (using a recovery factor of 0.5 vs. 1.0 in the PBR calculation), and by setting a specific cap on the number of female PCFG whales that can be harvested. Any struck and lost whales would be deducted from the harvest limit based on the proportion of PCFG whales in the Makah U&A area during that season. The probability of approaching a WNP whale is equivalent to that in Alternative 2, with slightly less likelihood of a strike or unsuccessful harpoon attempt given the lower number of strikes allowed.

The Commission notes that this offshore requirement would significantly alter the very nature of the hunt since it would need to be conducted with motorized vessels only. The request by the Tribe is based on a strong interest in adherence to cultural traditions, and the use of canoes is an important aspect of their traditional hunting practices. Furthermore, hunting farther from shore in small vessels presents more risk to the hunters. The impacts on PCFG gray whales under this Alternative would be slightly less than Alternative 2, not only because of the distance from shore, but also because of the lower caps on mortality of PCFG whales as a whole and specifically on female PCFG whales, and because it accounts for struck and lost whales in proportion to the presence of PCFG whales in the hunting area.

Alternative 4 – Summer/Fall Hunt

The Summer/Fall hunt Alternative, which is exactly the opposite in timing to the Makah proposal, would virtually rule out any potential direct impacts on WNP gray whales, given what we currently know about the timing of their presence off the Washington coast. It is therefore the most precautionary Alternative in terms of avoiding WNP whales; however, it also would virtually ensure that the whales taken will be from the PCFG, since this would be the peak time at which the PCFG would be in the Makah U&A area. This Alternative also requires hunters to approach only known males. The higher PCFG interaction rate under this Alternative is also addressed through a stricter cap on the number of strikes and whales landed, counting all struck and lost whales against the PCFG cap, and reducing the cap by other known sources of human-caused mortality. While the Commission supports measures to minimize potential interactions with WNP gray whales, Alternative 4 would result in a very small number of whales harvested each year – a maximum of one gray whale. Furthermore, it is estimated that it would take the Tribal hunters around seven days to locate and strike a known male, according to the Makah's analysis that is supported in the DEIS. The Commission believes that other options for the timing of the hunt could better balance the desire to limit the possibility of WNP interactions with the potential impacts on PCFG whales.

Alternative 5- Split-Season Hunt

The intent of the proposed split season is to avoid killing a WNP gray whale while still minimizing the chances of killing a PCFG whale. The cap on killing PCFG whales is limited to 10 percent of the PBR, calculated as under Alternative 3 (using a recovery factor of 0.5), resulting in a total mortality cap of 0.27 PCFG whales/year. Any whale struck but not landed would count against the mortality cap in proportion to the presence of PCFG whales in the Makah U&A area during that season. While the 10 percent of PBR cap is based on the practice in other situations under the MMPA (i.e., achieving the Zero Mortality Rate Goal for incidental lethal take in commercial fisheries and authorizing incidental serious injury and mortality of ESA-listed marine mammals in commercial fisheries), the Commission finds this cap to be overly restrictive for whaling by the Tribe, particularly given that the PCFG is not necessarily a separate stock, and is not listed under the ESA. This split-season Alternative would result in the lowest allowable whale harvest by the Makah, notably a maximum of one PCFG whale per year, but also with only one PCFG whale every five years. As noted in the DEIS, the Makah would have to accept a "hiatus" in whaling of up to four years after landing, or just striking and losing, one whale under this mortality cap. This alternative would severely hamper the ability of the Makah to conduct a traditional hunt as it could take place

only every 3-5 years depending upon the estimated abundance of PCFG gray whales and the timing of the hunt.

Any changes in the estimated abundance of PCFG whales would result in a modification of the cap. According to Calambokidis et al. (2014) (and the draft 2014 Stock Assessment Report, Carretta 2015) the current estimate of PCFG whales, excluding transient whales, is 209 (SE=15.4), which would yield the possibility of harvesting a whale every three years rather than every five years. The Commission notes that all Alternatives should be considered in light of a flexible cap as estimates of the PCFG population are modified through new research.

Alternative 6 - Different Limits on Strikes and PCFG Whales, and Limited Duration of Regulations and Permits

Alternative 6 is the same as Alternative 2 except that there would be a more restrictive limit on the number of strikes (3.5 per year), which would halve the probability of an encounter with a WNP gray whale. In addition, the PCFG mortality limit would be set as in Alternative 3, however reduced for other sources of human-caused mortality, for a total cap of 2.25 PCFG gray whales/year. All struck and lost whales would count against this cap. A limit on the number of strikes would likely curtail the Tribe's hunting activities, making it more challenging for the hunters to land a whale successfully. Nevertheless, the analysis of Alternative 6 results in an estimate of no more than four whales killed in a single year and seven over two years. Alternative 6 would also require that permits be limited to three years, and that the MMPA waiver period end after 10 years. The Commission believes that some form of ongoing review and flexibility in the regulations governing the hunt should be part of the final action should the waiver be issued, but that requiring a new rulemaking after 10 years may not be necessary.

Discerning the category of gray whale approached, struck, or harvested

The Commission is concerned about how the Makah whale hunt can be monitored in real or near-real time. In other words, the Commission is not convinced from the information provided in the DEIS that it will be feasible for the Makah hunters and hunt managers to discern quickly (within days) whether a given animal that was pursued, struck and lost, or landed was a WNP, ENP, or PCFG gray whale (this concern might also apply to sex determination in cases where there is a cap on the number of female PCFG whales that are allowed to be taken). The catalogues of PCFG and WNP whales appears to allow considerable ability to identify members of those groups even at a distance (including potentially the sex), but this assumes that at least one scientist with the requisite experience and skill is present with the whalers or that photographs sufficient to allow later identification of whales are taken by those who are present. This will be particularly important in determining which type of whale was approached or struck and lost.

Commission Recommendations for Formulating the Elements of the Preferred Alternative

In making the recommendations below, the Commission notes that whatever Alternative(s) NMFS includes in its proposed rule will be subject to review and possible modification in the course of the rulemaking. Thus, at this stage, without hearing the testimony and arguments made by all of the parties to the rulemaking, it is not possible for the Commission to make definitive pronouncements of its eventual positions. However, at this juncture, the Commission recommends

that NMFS adopt a preferred Alternative that strives for a balance between the risks of encountering a WNP gray whale – whether such encounter ends up with an approach, a strike, or a landed whale – and the risk of taking PCFG gray whales above the number that would keep this group within its OSP or some proxy for OSP. At the same time, the Commission believes that, if consistent with the requirements of the MMPA, there should be a reasonable opportunity for the Tribe to harvest at least one gray whale per year. Given these factors, the Commission recommends that:

- The hunting season should be split to require that at least a portion of the hunt occurs when it is highly unlikely that a WNP gray whale would be harvested, while also ensuring adequate protection for PCFG gray whales.
- The hunt should be conducted in the Makah U&A area as described under Alternative 2, but with year-round restrictions around Tatoosh Island and White Rock.
- PCFG gray whale limits should be derived using a recovery factor of 0.5 in order to reflect the uncertain status of this feeding group including whether or not it qualifies as a population stock; these limits should be adjusted as new information on stock structure and improved estimates of PCFG numbers become available.
- Mortality caps should be set taking into account other (non-whaling) human-caused mortality, and these other sources of human-caused mortality should continue to be addressed by NMFS.
- All struck and lost whales should be counted against the mortality cap in proportion to the presence of the PCFG in the Makah U&A area in the corresponding season.
- There should be a limit on the number of whales that can be struck each year, particularly during the seasons when WNP and PCFG whales are most likely to be present in the Makah U&A area.
- The Tribe should be required to use a combination of traditional and "modern" hunting methods so as to minimize the time to death of a struck whale, and reduce the possibility that a whale will be struck and lost.
- In light of the two recently completed workshops on range-wide population structure and status of gray whales in the North Pacific (IWC 2015, IWC in press) and the additional workshop planned by the IWC Scientific Committee for April 2016, along with ongoing research by NMFS and others to improve understanding of stock structure, the preferred Alternative should include be some form of periodic review of these issues, perhaps in conjunction with permit reissuance, or more frequently as new information warrants.

The Commission also recommends that all of the elements that are included across each action Alternative (as listed on pages 2-3 – 2-4 of the DEIS) be included in the final preferred Alternative.

The Commission hopes these comments and recommendations are useful and looks forward to working with NMFS on the proposed rule.

Sincerely,

Rebecca J. Kent Rebecca J. Lent, Ph.D. Executive Director

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