UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

June 21, 2004

John M. Starkey
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15400 200 Street
Saint Croix Falls, Wisconsin 54024

Dear Mr. Starkey:

Thank you for your letter presenting the Native Village of Tyonek's (NVT) comments on the Subsistence Harvest Management Plan for Cook Inlet (CI) beluga whales (Plan). We reviewed these comments and to the extent possible attempted to incorporate NVT's concerns into our final Plan. Our responses to your comments are presented below. As you are aware, this Plan was submitted to Administrative Law Judge Parlen McKenna (ALJ).

1. *NVT contests the use of 1,300 as the carrying capacity (K) for the CI beluga whale stock and the corresponding target of 780 whales for recovery to Optimal Sustainable Population (OSP) due to their uncertainty.*
The purpose of the Plan is to manage subsistence harvests while recovering this stock to OSP. For the purposes of developing this Plan, National Marine Fisheries Service (NMFS) has used the best available information which identifies the values of 1,300 for K and 780 for Maximum Net Productivity Level. These values will be reviewed and possibly revised as additional data become available.

2. *NVT strongly disagrees with the objective that harvests should not delay time-to-recovery by more than 25 percent with 95 percent certainty (25/95 criterion).*
The Plan intends to strike a balance between the timely recovery of this depleted stock and continuation of subsistence harvests. It is reasonable to conclude that removals of animals from a population will delay the recovery, and the relative increased risk of further depletion or failure that the population faces at reduced numbers will increase as recovery is delayed. This is the basis for using the delay in recovery time as a metric. A delay in time to recovery (when compared with zero harvest) of more than 25 percent would present serious concerns regarding unforseen events and risks, as described above. Assigning a goal of having 95 percent certainty that this delay is not exceeded helps to ensure recovery under management. Please note that NMFS is setting harvest levels which may violate the 25/95 goal as appropriate to provide reasonable continuation of subsistence harvest.

3. *NVT agrees with the interim harvest for 2005-2009, as negotiated at the 7 December 2003 meeting. NVT does not believe NMFS should needlessly push ahead to develop a long-term harvest plan before sufficient reliable information exists to form this plan.*

The Plan specifies harvest levels for an interim period, 2005-2009. During this time, more information will be collected and analyzed on the CI beluga whales. Harvest levels for the following five year interval (2010-2014) will be decided based on the criteria specified in the Plan.

4. *NVT requests a method to adjust the harvests upward within the five year period, as well as a provision for emergency restrictions.*
It would be difficult to monitor the CI beluga whale population and determine harvests in time intervals shorter than five years. NMFS prefers to keep the five year intervals to acquire the necessary population abundances that will determine harvest levels and to develop corresponding co-management agreements for the same five year interval. The five year interval is necessary to accumulate enough data on the CI beluga whales to determine the population trends. A five year plan will also allow the hunter communities to plan the hunts over a set period of time. The potential for upward adjustments does exist in the Plan and is dependent on population levels and response.

5. *NVT recommends a 5 to 10 year Plan if the 25/95 criterion is eliminated and depending on how recovery is determined.*
The 25/95 goal is not being eliminated.

6. *It may be reasonable to set a floor below which no harvest is allowed, however, NVT does not believe there has been enough consultation with the Native Parties in selecting 200 whales (lower limit). Declaring a moratorium on subsistence for a full five year interval is drastic and some shorter interval would be better.*
The abundance level below which this plan would prohibit harvests (260 whales) was set to insure that there would be a low likelihood of harvesting from a population of 200 or fewer animals. A population of 200 represents a point where the approximate *effective* population size may be as few as 60 beluga whales. That is, at a level of 200 animals, as few as 60 reproductively active females may be in the population. If the estimated beluga whale population falls below 260 animals, no harvest is allowed. It would take three or four years of subsequent data to indicate that the population was significantly greater than the 200 animal limit. The required time allowed to identify this observed change is near the planned five year interval.

7. *NVT stated that hunters should not decrease harvest levels for insignificant and relatively temporary population declines after the stock has reached some level of recovery, short of NMFS' OSP level. The range of OSP should be reexamined at least every five years.*
NMFS intends to review population indices at five year intervals. The Plan uses a five year running average to reduce the probability of reducing harvests based on insignificant and temporary declines.

8) *Emergency restriction may be necessary, but subsistence uses should not be eliminated or further restricted unless it can be demonstrated that such restrictions are necessary. Reduction*

in take should be made through the co-management process, using minimal and flexible guidelines that are incorporated into the co-management agreement (sections 101(b) and 119 of the MMPA).
The Unusual Mortality Limit is 6 percent of the population average, representing the 95th percentile of the distribution of observed mortalities in the years 1999-2003. NMFS believes that this is a reasonable index of excessive mortality, and that annual mortalities above this number should stop the harvest until such time as the population recovers from those mortalities.

9) *Regarding 4(a) of the NMFS draft Plan: The method for conducting annual surveys should be continually re-evaluated, including the knowledge of local subsistence hunters.*
NMFS will continue to improve the survey techniques to better improve accuracy. However, all future surveys and their techniques will be conducted so that the population abundance estimates are comparable to all the survey years. In this manner, NMFS will be able to compare annual abundance surveys and identify trends related to the CI beluga whales. NMFS will continue to work with the local subsistence hunters regarding traditional wisdom and knowledge of the CI beluga whales and their habitats.

10) *Regarding 4(c) of the NMFS draft Plan: NVT suggests that this statement be amended to read "the goal of the MMPA is to recover depleted stocks to OSP consistent with causing the least adverse impact to subsistence users."*
This section of the Plan has been reworded.

11) *Regarding 4(e) of the NMFS draft Plan: The CI beluga whale population is not recovering as predicted, despite an extremely minimal subsistence harvest over the last several years. NMFS needs to commit to the development of a conservation plan (section 115(b) of the MMPA) to address habitats and all other issues, including its time line. NMFS should also consider listing the stock under the Endangered Species Act (ESA) if the population continues to decline.*
This section of the Plan has been reworded. Specific text is included that recognizes other potential impacts to the beluga whale population and the development of a CI beluga whale conservation plan. Time lines on the conservation plan and consideration of the ESA are not identified in this harvest Plan, but will be part of the conservation plan process.

12) *Regarding 4(l) of the NMFS draft Plan: Co-management agreements should include a process and substantive measures to ensure that subsistence users are meaningfully involved in all aspects of CI beluga whale management.*
This section of the Plan has been reworded. Specific text now elaborates on co-management agreements as requested by NVT. Items and concerns not part of this Plan will be addressed with the co-managers under co-management agreements.

Comments of Dr. Andre Punt regarding NMFS's January 15, 2003 Proposed Subsistence Harvest Plan for CI Beluga

1. *a) The Plan makes no provision for the possibility that recovery will not occur in the*

absence of a harvest and there is a reasonably large probability of this. An additional management goal is needed if continued reduction is likely.
The purpose of this Plan is to regulate subsistence harvest. NMFS agrees it is possible the stock may fail to recover even if no subsistence harvest occurs, although we consider this unlikely. Regulation of other activities may become necessary to promote recovery of this stock. NMFS is currently examining these non-harvest factors separately within a broader Conservation Plan.

b) The harvest of 1.5 whales/year is consistent with the 25/95 criterion only if the implications of the growth rate being less than about 1.5 percent are discounted as being implausible.
Clarification has been given to the harvest levels as related to the 25/95 criterion.

2. *The Plan needs to acknowledge that the 1,300 carrying capacity (K) is subject to considerable uncertainty and to include a provision that the target population size could be changed with improved data.*
Refer to Page 1, number 1. NMFS acknowledges that for the purpose of estimating the delay caused by alternative harvest strategies, we use the value of 1,300 for K. Over time, more information on the beluga whale population will develop and the carrying capacity may be refined accordingly.

3. *For operational purposes, it makes more sense to refer to changes in the level of harvest over five year periods.*
NMFS agrees that five year harvest intervals are a fair management strategy. The five year intervals will allow NMFS the minimum necessary time to gather additional data on the CI beluga whales to determine the harvest levels.

4. *Some of the terms used in the draft Plan are undefined or inadequately defined, making the draft Plan inoperable.*
NMFS has clarified terms throughout the Plan.

5. *The draft Plan needs to be clear that harvest levels will be determined after each five year period and changes to the harvest levels within that period only occur because of unusual mortality or decline event occurs.*
NMFS has clarified that harvest levels are determined every five years only, and changes within that interval are due to the Unusual Mortality Limits.

6. *The criteria for setting the harvest levels for each five year interval was not fully specified nor have their implications been tested using the framework to evaluate the delay in recovery consistent with the management goals. More technically complete specifications were provided by Dr. Punt.*
NMFS thanks Dr. Punt for his analysis on harvest level goals. NMFS has provided the methods that determine harvest levels in the Plan.

7. *The emergency clause is unclear. The implications of unusual mortality needs to be rethought and retested.*
NMFS has clarified the emergency levels and Unusual Mortality Limit.

8. *Portions of Part IV, section g. are unclear and inconsistent.*
This paragraph is no longer in the Plan.

9. *A statement in Part IV, section h. is inconsistent with clauses in criteria 2, leading to non-constant harvest levels.*
This paragraph is no longer in the Plan.

10. *A portion of Part IV, section h. refers to the Technical Committee, whose terms of reference are not listed.*
This paragraph is no longer in the Plan.

Thank you for your comments on this harvest management plan. Please direct any questions to Kaja Brix at (907) 586-7235.

Sincerely,

James W. Balsiger
Administrator, Alaska Region

cc: Peter Merryman
Dr. Andre Punt

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