

**MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 905
BETHESDA, MD 20814**

IN THE MATTER OF

**PROPOSED REGULATIONS GOVERNING
THE TAKING OF THE COOK INLET, ALASKA,
STOCK OF BELUGA WHALES BY ALASKA NATIVES**

Docket No. 000922272-0272-01

**Response of the Marine Mammal Commission to the Initial Filings of the National
Oceanic and Atmospheric Administration and the Native Village of Tyonek**

By Order of June 10, 2004, the court directed the parties to file "[a]ny rebuttal or reply comments, objections, or proposed written testimony" on or before July 22, 2004. This document, along with the rebuttal testimony of Dr. Daniel Goodman and the attachment thereto, constitutes the Marine Mammal Commission's response to the initial filings of the National Oceanic and Atmospheric Administration and the Native Village of Tyonek submitted to the court on July 15, 2004.

Goals of the Marine Mammal Protection Act

The declaration of Ms. Brix states that the agency "must balance the goal of recovery with the need to provide reasonable opportunity for traditional subsistence hunting by Alaska Natives." Comments submitted by Tyonek also argue for a need to "achieve a reasonable balance of the dual goals of achieving recovery and providing for the continuation of subsistence uses." The Commission disagrees with these characterizations of the goals of the Marine Mammal Protection Act and with the assessment of their relative importance.

Although the taking of marine mammals by Alaska Natives is authorized under section 101(b) of the MMPA in certain instances, providing subsistence hunting opportunities is *not* included as one of the goals of the Act in section 2, which sets forth the basic findings and policies of the statute. In contrast, section 2(2) clearly provides that marine mammal stocks "should not be permitted to diminish below their optimum sustainable population" and that "measures should be *immediately* taken to replenish any...stock which has already diminished below that population." (Emphasis added.) Moreover, section 2(6) states that the primary objective of marine mammal management

“should be to maintain the health and stability of the marine ecosystem,” and that “*whenever* consistent with this primary objective, it should be the goal to obtain an optimum sustainable population...” (Emphasis added.)

To the extent that providing continued subsistence harvesting opportunities to Alaska Natives can be characterized as a “goal” of the MMPA, it clearly is subservient to the overarching goal of the maintaining marine mammal stocks at their OSP and bringing about the prompt recovery of stocks that are depleted. This relative importance of recovery versus subsistence opportunities is also reflected in section 101(b) of the Act, which provides for the regulation of subsistence taking of depleted stocks, consistent with the purposes of the Act, until the need for such regulations has disappeared (i.e., until the stock has recovered). Thus, contrary to the assertions of NOAA and Tyonek, the statute does not mandate balancing the provision for continued subsistence hunting opportunities against recovery of depleted stocks when allowing such hunting would conflict with the paramount goal of achieving recovery of the stock.

Documentary Evidence

The filing from Tyonek indicates that Dr. Punt will continue to refine his analysis of Tyonek’s alternative method for establishing harvest levels and requests that the court allow Tyonek to submit additional evidence in this regard as it is developed. The Commission has no objection to Tyonek’s request, provided that other parties are likewise provided the opportunity to supplement the record, either before or at the time of the hearing. In this regard, Dr. Goodman has had only a very limited time to assess the implications of the revisions to the program used by Dr. Hobbs to generate the table of proposed harvest levels and the “significant changes” to the table that resulted. In addition, Dr. Goodman has had less than a week to analyze the alternative harvest regime proposed by Tyonek in its initial filing. The Commission therefore requests that Dr. Goodman be allowed to present additional evidence on these issues.


As noted in Dr. Goodman’s rebuttal testimony, we had expected that the National Marine Fisheries Service would be preparing for submission, or at least for use by the parties, a report summarizing the deliberations of the technical team. (See the final paragraph of the enclosed May 3, 2004, e-mail from Dr. Hobbs.) Inasmuch as that report has not been prepared and the record before the court only selectively documents the work of the team, we request that Dr. Goodman be allowed to present testimony concerning the information that was reviewed and agreed to by the other team members.

Proposed Testimony of Peter Merryman and Donita Peter

As we read the court’s June 10 order, it requires that parties submit a written copy of proposed witness testimony, rather than a summary of the general areas that the witnesses intend to address. It does not appear that the proposed testimony of Mr. Merryman and Ms. Peter satisfy the letter of the pre-hearing order. Nevertheless, the Commission believes that, with one exception, these witnesses should be given the opportunity to testify on the identified issues at the hearing and we have no objection to

them doing so. The one exception is the proposal that Mr. Merryman be allowed to testify on the need for the Cook Inlet Marine Mammal Council (CIMMC) to be involved in the development of the conservation plan for Cook Inlet beluga whales. Although the Commission agrees that participation by CIMMC in this process is appropriate and important, and should be encouraged, we fail to see how the organization's involvement in developing the conservation plan has any relevance to the issues under consideration in this rulemaking.

Dated this 22nd day of July 2004.


Michael L. Gosliner
General Counsel

Counsel, by his signature above, certifies that a copy of this pleading and Dr. Goodman's rebuttal testimony were served via e-mail, facsimile, express delivery service, and/or U.S. mail on all parties.

IN THE MATTER OF**PROPOSED REGULATIONS GOVERNING
THE TAKING OF THE COOK INLET, ALASKA,
STOCK OF BELUGA WHALES BY ALASKA NATIVES****Docket No. 000922272-0272-01****REBUTTAL TESTIMONY OF DANIEL GOODMAN, PH.D.**

1 This declaration responds to several of the points set forth in the declarations and other
2 documents submitted by the National Oceanic and Atmospheric Administration and by the
3 Native Village of Tyonek on July 15, 2004. I will first address the declarations submitted on
4 behalf of the National Oceanic and Atmospheric Administration.
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6 The Declaration of Kaja Brix states that the National Marine Fisheries Service's goals,
7 pursuant to the Marine Mammal Protection Act are "to recover depleted stocks, maintain stocks
8 at Optimum Sustainable Population (OSP) levels, and allow for subsistence use." She
9 acknowledges that subsistence taking is not compatible with the Service's 25-95 recovery time
10 goal if the population is declining or experiencing no growth. I agree with that assessment —
11 there must be some minimal level of population growth if the delay in recovery time standard is
12 to be met or, more generally, if recovery will ever be achieved. I disagree, however, with the
13 Service's efforts to accommodate continued removals from the population in the face of a
14 declining or static population trend.
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16 Despite Ms. Brix's assertion that the harvest regime proposed for declining and stable
17 populations "is scientifically sound" and includes safeguards that "provide for the recovery of the
18 stock," this is not the case. In fact, any removals from a depleted stock that is declining or not

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1 growing will negatively impact the stock and will make recovery less likely. Moreover, as
2 discussed in greater detail below, I do not believe that the NMFS proposal can appropriately be
3 characterized as being "scientifically sound," inasmuch as it relies on an assumed population
4 growth potential of between 2 and 6 percent, when the empirical evidence derived from the
5 abundance surveys indicate a higher likelihood that the population has a growth potential lower
6 than 2 percent.

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8 The declaration submitted by Ms. Brix indicates that "NMFS has committed to a
9 continuing annual survey program to assess the abundance of the Cook Inlet belugas." While
10 encouraging, this commitment is inconsistent with the statement made in the Harvest
11 Management Plan submitted by the Service that funding of this program in 2006 and in
12 subsequent years is not guaranteed and that surveys may be conducted less frequently than every
13 year. As indicated in my declaration filed on July 15, the proposed harvest regime is premised
14 on having access to data of comparable quantity and quality to that collected over the past several
15 years. This is an important assumption and should be recognized explicitly in the recommended
16 decision, with a corresponding acknowledgement that a more conservative approach to setting
17 harvest limits would be in order if the current system for monitoring population abundance were
18 weakened.

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20 Ms. Brix's declaration also states that NMFS has begun the process of developing a
21 Conservation Plan for the Cook Inlet beluga whale. While this is welcome news and would
22 satisfy the Service's responsibilities under section 115(b) of the MMPA, it does not bear on this
23 proceeding. Unless NMFS has knowledge that factors other than subsistence hunting may be
24 causing the deaths of Cook Inlet beluga whales or impeding the stock's recovery in some other
25 way, and unless those factors can be ameliorated, they should have no bearing on the subsistence
26 regime adopted in this rulemaking. If NMFS has knowledge that factors other than subsistence
27 hunting may be causing the death of Cook Inlet beluga whales or impeding the stock's recovery
28 in some other way, these factors ought to be revealed now and their effects ought to be
29 represented in the model that NMFS is using in their calculations of the time to recovery and
their calculation of the performance of their proposed Plan for regulating subsistence harvest. As

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1 it now stands, no such factors are mentioned in the Plan or the documentation presented by
2 NMFS to support it, and their possible effects are not represented in the model used by NMFS to
3 assess the performance of the proposed harvest regime.

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5 The declaration submitted by Roderick Hobbs indicates that I served on "a technical
6 review team charged with reviewing data and population models for the purpose of developing a
7 long-term harvest policy consistent with recovery of the Cook Inlet beluga population." Contrary
8 to what the participants in that process were led to believe, no report of the deliberations of that
9 technical team was prepared and made available for use in this hearing. But the NMFS filing,
10 absent a report of the technical review team, does not reflect the fact that the technical team
11 received, reviewed, and substantially agreed with the methods I used to calculate that there was
12 approximately a 75 percent probability that the growth capacity of the Cook Inlet beluga whale
13 population is less than 2 percent. Yet, despite this clear indication that the population is not
14 responding as expected to the interim harvest regime adopted in 2000, the NMFS and Tyonek
15 proposals continue to use the unjustifiably high estimate of 2 to 6 percent for R_{max} in projecting
16 the effects of their proposed harvest regimes. [As such, they present an unrealistically optimistic
17 assessment of the likely effects of those proposed regimes on the prospects of the stock to
18 recover consistent with the prescribed criteria or, for that matter, to recover at all.]

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20 Item 7 of Dr. Hobbs' testimony indicates that the computer program used to generate the
21 harvest table was distributed to the technical team at the end of April. Although this is correct, it
22 should be noted that there was no consensus on the appropriateness of that model or the
23 projections that it produced. Dr. Hobbs also explains that he received notice of errors in the
24 program from Dr. Punt on June 29, 2004, which caused him to make "significant changes in the
25 table." This error and the resulting changes were first called to the Commission's attention in a
26 July 14 e-mail from Dr. Hobbs. As such, I have not had an opportunity to analyze the nature and
27 extent of the changes fully. I therefore request that I be permitted to present further information
28 on these changes at the hearing.

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Dr. Hobbs' testimony indicates that "NMFS determined that a harvest from a population

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1 of 200 or fewer whales could represent an irreplaceable loss to the genetic diversity of the
2 population.” He then explains how the Service calculated that high certainty of detecting that
3 level would be achieved with a trigger at a population estimate of 260 individuals. His
4 declaration, however, does not provide any justification for having chosen to establish the “floor”
5 below which all harvest should be suspended at 200 animals in the first place, and the rationale
6 provided in the Plan itself is incorrect. I addressed this shortcoming in my July 15 declaration
7 and will not repeat that critique here. Nevertheless, because this is such a critical issue and the
8 Service’s proposal is so at odds with the generally accepted precepts of conservation biology, I
9 am appending the declaration filed by Dr. Russell S. Lande in litigation concerning the Service’s
10 decision that listing the Cook Inlet beluga whale stock was not warranted. Dr. Lande is one of
11 the world’s leading authorities in this discipline. I call your attention particularly to his
12 discussion of the risks to a stock based on small population size (see pp. 6-10). I agree with his
13 assessment and concerns. It is noteworthy that the risks to the Cook Inlet beluga population
14 identified by Dr. Lande in his declaration are applicable to the population as it exists today (the
15 lower confidence level of the population estimate from the 2003 survey was 289). The
16 suggestion by NMFS that the population could be allowed to decline below its present level
17 without appreciably increased risk is untenable.

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19 The comments submitted by Tyonek on the NMFS proposal indicate its belief that the 25-
20 95 criterion “may be appropriate in the early and more critical stages of recovery” (e.g. at <500
21 whales), but that reduced certainty of reaching recovery without undue delay is appropriate as the
22 population increases. Tyonek states that application of the 25-95 criterion throughout the
23 recovery phase “does not achieve a reasonable balance of the dual goals of recovery and
24 providing for the continuation of subsistence uses.” This critique of the NMFS proposal by
25 Tyonek misses the point. As discussed in Commission comments being filed separately,
26 recovery of the stock to its OSP and allowing continued subsistence opportunities are not dual
27 goals of the MMPA that must be evenly balanced. Rather, under the statutory scheme, the
28 principal goal is to achieve recovery of depleted stocks and, only when consistent with that goal,
29 to accommodate taking by Alaska Natives for subsistence purposes. It is by this standard that the
NMFS proposal and any alternatives proposed by the other parties should be assessed.

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2 I appreciate that Tyonek has recognized the critical status of the population and agrees
3 that the 25-95 criterion is appropriate, at least in the early stages of recovery. As for its
4 suggestion that more lenient standards might be invoked as the population recovers, I have not
5 yet had an opportunity to model the suggested alternatives or their implications for achieving
6 recovery of the stock. I will continue to assess Tyonek's proposal and respectfully request that I
7 be allowed to present my analysis in the course of the scheduled hearing.

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9 Another issue that both Tyonek and the Commission commented on is the proposed
10 measures for the selective harvest of male beluga whales. As discussed in my July 15
11 declaration, this makes sense from a conservation perspective, given what we know about the
12 reproductive strategy of this species. Whereas Tyonek suggested that hunters be allowed an
13 increased harvest for taking males, the Commission recommended that the harvest quota be
14 reduced if excessive females are taken. The Commission's approach is the appropriate one. The
15 proposed NMFS harvest plan clearly fails to achieve its own standard if the harvest is
16 unselective. Requiring that the harvest be almost exclusively of males would bring the
17 performance of the Plan closer to compliance with that recovery standard. It therefore makes
18 sense to adjust the harvest downward, if it appears that adult females, the most important
19 component of the population for recovery, are being put at risk by allowing an interim harvest.

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21 Although my analysis of the alternative harvest regime introduced by Tyonek and in Dr.
22 Punt's statement is ongoing, it is readily apparent that it suffers from the same fatal flaw as the
23 NMFS proposal. That is, it uses an assumed R_{max} of 2 to 6 percent to calculate the allowable
24 harvest levels despite substantial evidence that the true growth capacity of the population is
25 significantly lower.

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29 Pursuant to 28 U.S.C. § 1746, I swear under penalty of perjury that the foregoing is true
and correct to the best of my knowledge and belief.

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Executed on 22 July 2004, in Bozeman, Montana.

Daniel Goodman, Ph.D.

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