

8.6 Comment Analysis Report

Final Environmental Impact Statement for Issuing Annual Quotas to the Alaska Eskimo Whaling Commission for a Subsistence Hunt on Bowhead Whales for the Years 2008 through 2012.

1. Introduction

The Public Comment Period and the Comment Analysis Report

On August 3, 2007, a Notice of Availability of the *Draft Environmental Impact Statement for Issuing Annual Quotas to the Alaska Eskimo Whaling Commission for a Subsistence Hunt on Bowhead Whales for the Years 2008 through 2012* was published in the *Federal Register*, marking the beginning of the public review period for the document. At the same time, printed copies and/or compact disc copies of the Draft Environmental Impact Statement (EIS) including appendices were made available to interested governmental agencies, non-governmental organizations, and individuals who requested copies. The Draft EIS and all of the appendices were also available for review or download online at the National Marine Fisheries Service (NMFS) Alaska Regional Office website. The public review period ended on October 12, 2007.

During the review period, a total of four comment letters were received from:

1. Marine Mammal Commission, September 20, 2007
2. Animal Welfare Institute, October 12, 2007
3. Alaska Eskimo Whaling Commission, October 12, 2007
4. Environmental Protection Agency, October 12, 2007

Comments were submitted by e-mail and mail to the project office. All comments received or post-marked by or on October 12, 2007 are included in this Comment Analysis Report (CAR).

Response to Public Comments

The National Environmental Policy Act (NEPA) requires government agencies to include in the Final EIS all the substantive comments received on the Draft EIS. The final document must include responses to the comments or comment summaries, if changes to the Draft EIS have been made because of those comments, and an indication of where such changes were made in the document. This CAR serves as the public comment summary and response to comment document for the Draft EIS. It presents the methodology used by NMFS in reviewing and sorting the comments, and it presents a synthesis of all comments that address a common theme. A careful and deliberate approach has gone into ensuring that this report reviews, considers and provides responses to all substantive public comments.

Analysis of Public Comments

All submissions on the Draft EIS were assigned identifying numbers by NMFS in the general order received, and forwarded to the NMFS and contractor analysts for replies. Each submission was read by at least two individuals to insure that all substantive comments were identified. The term substantive comment refers to an assertion, suggested alternatives or actions, data, background information, or clarifications relating to the Draft EIS document or its preparation. In the comment letters received, 34 specific substantive comments were identified. Next, 10

issue categories were developed in order to group together substantive comments with common themes (Table 1).

The comments were succinctly summarized for use in the report that follows. Comment summary statements are not intended to replace actual comment submissions, and the full comment letters may be consulted in the attachment to this report.

Table 1.

ISSUE CODE	ISSUE
ALT	Alternatives
BEW	Biological Effects of Whaling
CE	Cumulative Effects
DSN	Demonstrated Subsistence Need
ENF	Enforcement
HMT	Humane Method of Take
MON	Monitoring
NEP	National Environmental Policy Act
PPN	Public Participation
SEW	Social Effects of Whaling

This report organizes the response to comments by issue categories in alphabetical order. To find the response to a specific submission:

1. Look up the name of the organization in Table 2.
2. Note the comment code associated with the submission.
3. Turn to the section in the response to comments report for the comment code.

Table 2.

COMMENTER	COMMENT CODES
Marine Mammal Commission	BEW01, MON01,
Animal Welfare Institute	ALT01, ALT02, ALT03, BEW01, BEW02, BEW03, BEW04, BEW05, BEW06, BEW07, BEW08, BEW09, CE01, DSN01, DSN02, DSN03, DSN04, ENF01, HMT01, HMT02, NEP01, NEP02, NEP03, NEP04, PPN01, PPN02
Alaska Eskimo Whaling Commission	ALT02, CE02, CE03, CE04
Environmental Protection Agency	SEW01, SEW02

2. Public Comments and Responses

Alternatives (ALT)

This section includes comments on the adequacy of the four action alternatives included in the Draft EIS, including the basis for dismissing some alternatives not retained for analysis.

ALT01

The Draft EIS reviews an inadequate range of alternatives, notably an insufficient distinction between Alternatives 2 and 3. A lower level of strike allocation should also be evaluated as an alternative.

Response:

We disagree. The alternatives analyzed fall within the reasonable range of actions being considered by the agency. They mirror a similar range of alternatives analyzed previously in the 2002 Environmental Assessment (EA) and were again reintroduced during the scoping period of this EIS. Each alternative evaluates a maximum possible strike allocation, and a maximum possible number of whales landed, in order to inform the agency of the maximum possible effects of each alternative. In addition, the annual strike quota in each case reflects the existence of a relatively consistent harvest regime, where the likely variation might come in the amount of carry-over from one year to the next. NMFS has been cooperatively working with the AEWC for 20+ years on conservation and management of this stock of bowhead whales, and in recognition of subsistence and cultural needs of Alaska Eskimos. This stock of bowhead whales has also been extensively studied by the IWC's Scientific Committee, which has been developing a Strike Limit Algorithm for Western Arctic bowhead whales that would increase the allowable maximum carry-over to 50% of the unused annual strike limit from a previous year (as described in Alternative 4). The range of alternatives is reflective of this history and is appropriate under these circumstances.

ALT02

The agency has evaluated a reasonable range of alternatives and has selected a preferred alternative that effectively will allow an Alaskan Eskimo bowhead whale subsistence hunt sufficient to satisfy the present nutritional and cultural needs of our Arctic communities.

Response:

Comment acknowledged.

ALT03

Alternative 4 is illegal because the Whaling Convention Act (WCA) requires compliance with decisions made by International Whaling Commission (IWC). The U.S. cannot authorize a rollover of 33 unused strikes, which exceeds the rollover of 15 allowed by the IWC.

Response:

Under NEPA, a federal agency can examine an alternative that would require new action by another jurisdiction (i.e. a change in regulation or statute) and this would be analogous to an alternative, such as Alternative 4, which would require a new action by the IWC. As noted in response to comment ALT01, the IWC's Scientific Committee has been developing a Strike Limit Algorithm (SLA) for Western Arctic bowhead whales that would increase the allowable maximum carry-over to 50% of the unused annual strike limit from a previous year. While the IWC has yet to adopt a bowhead SLA, NMFS is examining the effects of this level of carry-over in recognition of the IWC's ongoing work in this area.

ALT04

The Draft EIS provides inadequate rationale for dismissal of other alternatives.

Response:

The EIS dismissed lower and higher quotas because they did not meet the stated Purpose and Need for the federal action (e.g. the aboriginal need for subsistence, or went beyond the identified aboriginal need (and the AEWEC request). In addition, as noted in response to comment ALT01, each alternative evaluates a maximum possible strike allocation, and a maximum possible number of whales landed, in order to inform the agency of the maximum possible effects of each alternative.

Biological Effects of Whaling (BEW)

This section includes comments on the accuracy of bowhead whale population estimates, the genetic structure of the stock, effects of bowhead whaling on other wildlife, and the basis for the use of the catch control rule "Q" designed by the International Whaling Commission Scientific Committee.

BEW01

The effect of the hunt under the proposed quota will be minor and will not prevent the regional bowhead population from continuing to increase toward its optimum sustainable population level. The hunt has been well managed, so the subsistence quota should be adopted as proposed.

Response:

Comment acknowledged.

BEW02

The population estimate of bowhead whales made in 2001 may no longer be valid given all the changes in the Arctic environment.

Response:

Under the current management agreement a new population estimate should be obtained every 10 years to confirm population trends (IWC, 2001:67). In 2001, the IWC Aboriginal Subsistence Whaling Sub-committee considered the Scientific Committee's suggestion that "phase out" (i.e., progressive lowering of the quota in the absence of survey data) might be appropriate to begin the 10th year after the last accepted abundance estimate. Attempts to undertake a census might begin after about seven years from the most recent success as it might require several attempts to obtain a successful abundance estimate. The sub-committee also noted that a 10-year census interval rather than 5-year interval did not diminish the performance of proposed Strike Limit Algorithms (IWC, 2001:67).

Health of the ecosystem is very important to assess, therefore, indices of calf production and assessment of body condition based on photo identification are currently in process as well (Koski et al., 2007). In terms of climate change, Moore and Laidre (2006) concluded that reduction in sea ice cover will likely benefit bowhead whales by increasing prey availability along both production and advection pathways in the western arctic.

BEW03

The Draft EIS does not disclose and evaluate the methodology and assumptions used to count whales, i.e. the correction factors for missed whales.

Response:

Details of study design and research methodology for current abundance estimates are provided in Zeh et al. (1993) and George et al. (2004a) and is summarized in the 2nd paragraph in Section 3.2.1 of the EIS. This methodology is widely accepted in the scientific community; its evaluation is unnecessary for our analysis of alternatives.

BEW04

The Draft EIS does not discuss alternative estimates in the scientific literature on pre-exploitation abundance, stated as 10,400 – 23,000 bowhead whales in the Draft EIS.

Response:

This pre-exploitation abundance estimate (10,400-23,000) is not contrary to the scientific literature as cited by the commenter, (i.e. Breiwick and Braham, 1990; Everhardt and Breiwick, 1992 [*actually* Everhardt and Breiwick, 1992]; and Alter and Palumbi, 2007 [*actually* Alter et al. 2007]). Woodby and Botkin (1993) provide a thorough review of the models used by a number of authors, including Breiwick and many others, (see Table 10.2 in Woodby and Botkin, 1993) and the techniques these authors used to arrive at a bowhead whale stock size in 1848. The best estimate based on this study used a simple recruitment model to assess pre-exploitation size of the western Arctic population at 10,400 – 23,000, an estimate that fell within a number of the ranges presented in Table 10.2 in the cited study.

The Alter et al. (2007) interpretation of historic gray whale abundance based on the authors' analysis of genetic material is very much in debate at this time (e.g. see Baker and Clapham, 2004; Palsbøll et al., 2007; Alter and Palumbi, 2007). In 2004, in the light of a genetic modeling paper published in 2003 (Roman and Palumbi, 2003), the IWC Scientific Committee had considered the general methodological issue of estimating carrying capacity and/or pre-exploitation population size in the context of the Committee's assessment work. As a result of its discussions, the Scientific Committee agreed that such genetic methods have the potential to be one of a suite of tools that can be used to examine pre-exploitation abundance but that there are a number of limitations and uncertainties that must be considered when examining such data in a present-day management context. The Scientific Committee had agreed that the estimates of historic abundance provided in the Roman and Palumbi paper for the initial pre-whaling population sizes of humpback, fin and common minke whales in the North Atlantic have considerably more uncertainty than reported, and can not be considered reliable estimates of immediate pre-whaling population size. Particularly important in this regard is the mismatch between the time-period to which genetic estimates apply (i.e. the time period is difficult to determine and extremely wide) and the population sizes of whales immediately prior to exploitation (IWC, 2007).

BEW05

There is an insufficient discussion of the scientific disagreement over the genetic structure of the Western Arctic bowhead population, i.e., whether there is a single population or two.

Response:

Information has been added to Chapter 3 regarding the plausibility of multiple bowhead whale stocks in the Western Arctic population. At the 2007 IWC meeting in Anchorage, Alaska, the IWC Scientific Committee Sub-committee on Bowhead, Right and Gray Whales concluded after a three-year investigation of the stock structure of the Bering-Chukchi-Beaufort population of bowhead whales that the available evidence best supports a single-stock hypothesis for Western Arctic bowhead whales (IWC, 2007). This conclusion regarding the single-stock hypothesis is retained in the EIS. Moreover, this conclusion is the result of several years of research, and underlies the IWC's unanimous decision in 2007 regarding catch limits for 2008 through 2012.

BEW06

The Draft EIS inadequately discloses direct and/or indirect impacts to other wildlife, including information such as population size, trends and current subsistence rates.

Response:

Section 3.3 of the EIS contains the most recently available information about the relevant marine wildlife species other than bowhead whales, including the species' population status, trends, and representative numbers used for subsistence purposes. Additional information about these species is available in the cited references. For many species there are gaps in scientific survey data regarding populations and subsistence usage rates across the project area. These data gaps are acknowledged in the EIS. There is less background information about terrestrial birds and mammals because these species would not be disturbed by the proposed activity, bowhead whaling.

Direct and indirect effects on other wildlife species were considered to be minor or negligible based in part on the temporary and limited amount of disturbance to individuals of these species from whaling activities. The EIS acknowledges that some of these species may be hunted more or less in any given place and time depending on the success of bowhead whale hunters. However, hunting of these species would take place independently of bowhead whaling because each has its own cultural significance. The EIS acknowledges that the value of subsistence food from bowhead whales is not interchangeable with the subsistence value of other wildlife species and that hunting pressure on bowhead whales and other species is not compensatory. The contribution of the direct and indirect effects of bowhead whale hunting on the cumulative effects of other wildlife species is discussed in Section 4.7.2.

BEW07

The Draft EIS does not differentiate between the number of polar bears taken for subsistence purposes and those taken for sport hunting.

Response:

Sport hunting of polar bears has been prohibited in the U.S. since passage of the Marine Mammal Protection Act (MMPA) in 1972. The MMPA only allows coastal dwelling Alaska Natives to hunt polar bears for subsistence and handicraft purposes. The polar bear mortality data cited in Section 3.3 of the EIS therefore includes only subsistence hunting by Alaska Natives. Text has been added to Section 3.3 to clarify this issue.

BEW08

The most recent beluga whale subsistence take numbers are not provided.

Response:

Since 2003, Alaska Native hunters have landed the following number of beluga whales for the years 2004 through 2006: Beaufort Sea stock - 32, 20 and 5 whales; Chukchi Sea stock - 54, 43 and 31 whales; eastern Bering Sea stock - 132, 249, and 166 whales; Kuskokwim - 0, 2 and 9 whales; and Bristol Bay stock - 16, 19 and 20 whales (Kathy Frost, Alaska Beluga Whale Committee, personal communication, November 2, 2007). This information has been added to Chapter 3.

BEW09

NMFS must provide a more detailed explanation of the difference between potential biological removal (PBR) and Q, under what circumstances PBR or Q is appropriate for assessing the impact of human-caused mortality, and why the Q procedure supercedes the use of PBR.

Response:

As reported in Angliss and Outlaw (2007), “the development of a PBR level for the Western Arctic bowhead stock is required by the MMPA even though the subsistence harvest is managed under the authority of the International Whaling Commission (IWC). Accordingly, the IWC bowhead whale quota takes precedence over the PBR estimate for the purpose of managing the Alaska Native subsistence harvest from this stock.” The Q procedure was developed to determine subsistence harvest levels that allow continued recovery of the whale population managed under the authority of the IWC, whereas PBR was developed to limit marine mammal

incidental mortality and serious injury in commercial fisheries (Wade and Angliss, 1997), not to determine subsistence harvest levels.

BEW10

The Draft EIS provides inadequate justification for the use of 0.5 in the PBR calculation versus 0.1.

Response:

As reported in Angliss and Outlaw (2007), “the recovery factor (FR) for this stock is 0.5 rather than the default value of 0.1 for endangered species because population levels are increasing in the presence of a known take (see guidelines Wade and Angliss, 1997). Thus, PBR = 95 animals (9,472 x 0.02 x 0.5).”

Cumulative Effects (CE)

This section includes comments on the adequacy of analysis of cumulative effects, including the additive effects of oil and gas exploration and development, and climate change.

CE01

The Draft EIS fails to adequately evaluate the cumulative effects of various anthropogenic impacts to bowhead whales, their habitats, and their prey, such as impacts of oil and gas exploration and production activities and related noise impacts, vessel traffic and related noise impacts, and global warming.

Response:

Section 4.6.1.3 provide a discussion on the noise produced from oil and gas activities, including seismic surveys, site clearance activities, drilling and development of offshore oil and gas resources. Section 4.6.1.4 discusses the cumulative effect of noise from these oil and gas activities and well as other sources on the bowhead whale. This discussion relies heavily on the conclusion in the 2006 NMFS Biological Opinion for Beaufort and Chukchi Sea Federal Oil and Gas Leasing and exploration, and its effects on the endangered bowhead whale. Overall, the direct and indirect effect of noise and activity is believed to temporary and non-lethal. However, cumulative effects could occur if multiple activities occur simultaneously rather than consecutively.

Additional information about the contribution of the effects of oil and gas activities on bowhead whales has been included into the text by reference to other recent documents: (1) the final EIS for Beaufort Sea Planning Area, Oil and Gas Lease Sale, Sales 186, 195, and 202 (Minerals Management Service [MMS], 2002), (2) MMS’s EA for the Beaufort Sea Planning Area Lease Sale 202 (MMS, 2006), and (3) MMS’s EIS for Chukchi Sea Planning Area Lease Sale 196 (MMS, 2007). The level of analysis of the EIS regarding contribution of oil and gas activities to the overall cumulative effect is appropriate for the subject, which is bowhead subsistence whaling.

Impacts to bowhead whales from vessel traffic, including ship-strikes and noise, are discussed in Section 4.6.3 of the EIS. Impacts of vessel noise are primarily related to disturbance of migration. The effects of anthropogenic noise in general are discussed in detail in Section 4.6.1.

The past, present, and reasonably foreseeable future effects of climate change on bowhead whales and their habitat are discussed in Section 4.6.2. This section focuses on the likely effects on bowhead whales and their habitat and cites several international reports on the evidence for climate change and its general effects on the Arctic.

CE02

Concern is expressed about the apparent reliance on MMS EIS for Lease Sales 186, 195, and 202, particularly in regard to the significance thresholds for oil and gas impacts established in that EIS.

Response:

This EIS relies on NMFS and MMS environmental review documents along with original source documents for its analysis of cumulative effects on subsistence harvest practices and subsistence resources. The MMS EIS for Beaufort Sea Planning Area Lease Sales 186, 195, and 202 (MMS, 2003) and the more recent MMS EIS for Chukchi Planning Area Oil and Gas Lease Sale 196 (MMS, 2007) are both used for descriptive information concerning oil and gas exploration and development, and general conclusions about effects on subsistence harvests.

This EIS does not rely on the significance threshold established for the MMS EIS for Lease Sales 186, 195, and 202 for the effect of oil and gas activities on subsistence in its cumulative effects analysis. Instead, thresholds for direct, indirect and cumulative effects on subsistence uses in this EIS were independently developed for this analysis. These thresholds are discussed in Section 4.1.3 and displayed in Table 4.1.3.

Applying these thresholds, the analysts independently assessed the impacts of oil and gas exploration and development for this EIS. As shown in Table 4.9-3 (Alternatives 2 through 4), for spring whaling the cumulative effects of other activities, notably those associated with oil and gas exploration and development would be rated as adverse and minor. For fall whaling the likely magnitude of impacts from these activities is less certain, because it turns on the timing, location, and extent of oil and gas related activities and on the effectiveness of mitigative measures. Taking into account magnitude and likelihood, these impacts would be adverse and moderate, based on the effectiveness of current mitigation measures.

CE03

Identify the combined effects of seismic surveys, site clearance survey activities, and drilling on the subsistence hunting waters.

Response:

Section 4.6.1.1 provides a summary of past and present oil and gas activity in the Beaufort and Chukchi Sea and additional information is referenced in the recent MMS OCS five-year leasing program EIS for 2007-2012, the multi-year EIS for the Beaufort Sea and subsequent EAs (Lease sale 186, 195 and 202). The combined effects of oil and gas activity in terms of noise impacts on bowhead whales is also discussed in Section 4.6.1.3. A summary paragraph was added in Section

4.6.1.2 to provide a brief discussion on combined effects of lease sales, seismic activity, site clearance survey activity and oil and gas development.

CE04

The Draft EIS should provide more detail on the effects of oil and gas operations on the subsistence hunt.

Response:

Limited information on the views of Inupiat whalers concerning the deflection of bowhead whales due to oil and gas exploration is found in Sections 3.2.8, and 4.6.1. The discussion of cumulative effects on subsistence whaling practices in Section 4.8.1 includes a thematic account of potential effects from oil and gas development. However, regional residents have recently expressed concern that the growing level of oil and gas exploration has the potential to increase the deflection of bowhead whales during migration. As a result, subsistence whaling crews may find it more difficult to locate whales, or may have to travel greater distances and incur greater expenses to successful hunt for bowhead whales. Additional discussion has been added to Section 4.8.1 to more fully reflect recent testimony and analysis.

Demonstrated Subsistence Need (DSN)

This section includes comments on the method used to identify the subsistence need of the Alaska Eskimo Whaling Commission (AEWC) villages for bowhead whales and the appropriate level of allocation.

DSN01

The Draft EIS inaccurately asserts that the IWC definition of subsistence use was adopted by consensus in 2004.

Response:

Following the IWC's 55th annual meeting, a Small Working Group of countries, including the United States and the Russian Federation, reviewed IWC Schedule paragraph 13 regarding aboriginal subsistence whaling (See 2004 Chair's Report of the IWC at 15, IWC, 2005c). The Small Group reported its discussions and recommendations (IWC/56/4, IWC, 2004a) to the Sub-Committee on Aboriginal Subsistence Whaling at the 56th annual meeting (See IWC/56/Rep 3 at 8-9, IWC 2004b). The Small Group report, the Aboriginal Subsistence Whaling Sub-Committee Report, and the 2004 Chair's Report all contain the same definition of aboriginal "subsistence use" (See IWC/56/4 at 1; IWC/56/Rep 3 at 8; 2004 Chair's Report at 15). The Aboriginal Subsistence Whaling Sub-Committee endorsed the recommendation of the Small Group that its report (and a proposed Schedule amendment not germane to this response) be put forward to the Commission in plenary (2004 Chair's Report at 16). In the Commission's plenary meeting, the Russian Federation introduced the Small Group report, drawing particular attention to the definition of "subsistence use," and asked that it be adopted by consensus (Id.). Following discussion of the proposed Schedule amendment, the Commission then adopted both the report of the Small Group (containing the definition of "subsistence use") and a revised Schedule amendment by consensus (Id. at 17).

DSN02

Historical needs may not reflect modern needs. The subsistence need methodology adopted by IWC in 1986 makes no sense as it is based on a historical number of people and whales taken (i.e., 1910-1969) that may no longer be indicative of a level of need.

Response:

The IWC objectives concerning aboriginal subsistence whaling, noted in Section 1.2.2 of the EIS, seek to provide for an ongoing hunt “appropriate to cultural and nutritional needs,” whereas the comment appears to conclude that only the nutritional (or food) component of need is legitimate. The term “cultural need” is not further defined in the IWC Schedule nor in the studies of subsistence and cultural needs submitted to the IWC. However, it is reasonable to construe this as a matter of providing for continuity with the social and cultural practices and beliefs of previous generations. In this respect, the use of a baseline historic period in assessing the nutritional and cultural need is a rational approach.

From the early 1980s, the IWC has based catch limits on an estimate of whale harvests and Alaska Inupiat populations for a historical base period. A per capita rate of bowhead harvest for this historic period has then been applied to the current Alaska Native population of the AEWC member villages to derive a contemporary “subsistence and cultural need.” The current method, based on a historic base period of 1910 through 1969 was adopted by the IWC in 1988, and has been applied in six AEWC-commissioned studies since then. The U.S. government has relied upon the AEWC-commissioned studies developing its requests to the IWC for bowhead subsistence whaling allocations. Thus this approach is well-established in IWC decision-making.

In addition, the commenter urges use of the 2005 population data reported in the EIS show a decline of 4.5%, rather than the Census 2000 data as currently applied in the 2007 study on subsistence and cultural needs for bowhead. Over the years, the studies have used the most recent decennial census, or more current population data as available. In all cases, the estimate of the Alaska Native portion of population was based on the ratios documented in the most recent decennial census. The 2007 study (Appendix 8.1 in the EIS) is unlike the others conducted between decennial censuses (1988, 1994, and 1997) in using several years-old census data rather than more recent population developed by the Alaska Department of Labor. The study states that the 2000 U.S. Census is used because it “has race information, and the Alaska Native population in each of the whaling communities is reported.”

However, it is important to note that the U.S. request to the IWC for the subsistence bowhead whaling allocation considered the AEWC-commissioned study and other factors relevant to negotiations at the IWC meeting. Thus the 2007 study reports a subsistence and cultural need for the AEWC communities of 57 whales. However, the combined request of the U.S. and the Russian Federation was for a total of 285 bowhead whales for the five-year period from 2008 - 2012, (of which 25 would be available to the Chukotkan hunters and 255 would be available to the ten Alaska bowhead whaling communities). This represents an annual average of 51, compared to the 57 identified as the need level in the study. The U.S. request and the IWC catch limits have made adjustments to the level identified in the 2007 study.

In sum, the proposed federal action in this EIS would implement an IWC block allocation of 255 bowhead whales landed for the period 2008 - 2012. The U.S. provided to the IWC as background

information for its request a third-party report on subsistence and cultural needs that applied a methodology approved by the IWC. However, the U.S. and Russian Federation proposed, and the IWC approved, catch limits that are stable, identical to the levels authorized in the previous five-year block for 2003 - 2007. Additional language concerning the IWC approved methodology for identifying the subsistence and cultural need for bowheads has been added to the EIS in Section 3.5. Appendix 8.1 has been expanded to include the 1997 study which describes the methodology in more detail.

DSN03

A cultural need is not sufficient to allow for aboriginal whaling under IWC standards or U.S. law and the analysis of cultural patterns is not relevant.

Response:

As noted in Section 1.2.2 of the EIS, the IWC in 1994 adopted Resolution 1994-4 to reaffirm the IWC objectives concerning aboriginal subsistence whaling. The second of these objectives seeks “[t]o enable harvests in perpetuity appropriate to cultural and nutritional requirements.” Thus IWC has established a standard in which both cultural and nutritional requirements are integral. In 1983, the U.S. submitted the first such analysis in the *Report on Nutritional, Subsistence, and Cultural Needs relating to the Catch of Bowhead whales by Alaska Natives*. Since then the AEWC has commissioned six studies to quantify the “subsistence and cultural need,” and these have informed the proposal of the U.S. to the IWC concerning the allocation for the bowhead subsistence whaling. There is no assertion of a separate “cultural need” apart from the “nutritional and cultural need,” or “subsistence and cultural need.” As for the appropriateness of analyzing cultural patterns of Inupiat subsistence whaling, NEPA requires a holistic analysis of potential effects on the human environment, and this must reasonably include the social and cultural patterns associated with Inupiat subsistence whaling.

DSN04

Explain why AEWC villages need the allocated number of bowhead whales for food, when bowhead whales and other subsistence foods identified in the Draft EIS represent an average of approximately 9,483 pounds per person per year (26 pounds/person/day).

Response:

The comment asserts that the IWC allocation for subsistence harvest allocations is unreasonable in light of the commenter’s estimate that current production of subsistence foods amounts to 9,483 pounds per person per year. Since this quantity cannot be consumed, the commenter concludes that there must be significant waste of subsistence-taken food. The commenter’s estimated annual per capita production is 10.7 to 32.8 times the empirically documented figures of annual subsistence food production in the six baseline studies reported in Table 3.5-3 (i.e. 289 pounds per capita to 885 pounds per capita). The comment does not offer alternative empirical data to indicate that earlier study results were in error or that subsistence food production has changed by this order of magnitude in recent decades. Instead, the comment is likely based on alternative mathematic extrapolations.

The commenter recalculated the per capita rate of bowhead whale food production by offering an alternative figure for the Alaska Native population using bowhead whale foods. This resulted in an estimated annual per capita bowhead harvest level of 190 pounds, versus 157 pounds stated in

the EIS or a difference of 33 pounds. The commenter also expanded food production values for the four AEWC communities for which no baseline studies had been conducted. The comment states: “For the three communities of Gambell, Point Hope and Savoonga the Kivalina hunt levels were doubled since the population is more than half of the native populations recorded in Gambell, Hope and Savoonga.” However, a per capita rate already controls for different population sizes of communities. If the per capita values from Kivalina were expanded to other communities, then the resulting value would be the same, not doubled. The error of doubling the per capita harvest values from Kivalina would account for a difference on the order of 760 pounds. Together the two factors in the recalculation would represent a difference of approximately 800 pounds, not the 8,600 pounds or more stated in the comment.

In sum, the comment that the EIS fails to account for the potential over-harvest and waste of as much as 8,600 pounds of subsistence food per person per year must be set aside as lacking empirical foundation.

Enforcement (ENF)

This section includes a comment on the role of the AEWC in enforcing the regulatory conditions for bowhead subsistence whaling.

ENF01

The Draft EIS inadequately explains the enforcement role of the AEWC in relation to the MMPA, Endangered Species Act (ESA), WCA, and the International Convention for the Regulation of Whaling (ICRW) and its schedule.

Response:

The AEWC role in enforcement is established in the Cooperative Agreement between the National Oceanic and Atmospheric Administration (NOAA) and the AEWC (see appendix 8.2 of the EIS for the document). The Cooperative Agreement is signed by NOAA and so provisions of the agreement refer to NOAA. However, NMFS has been delegated the responsibility for implementation. As noted in Section 1.2.4 of the EIS, the NOAA-AEWC Cooperative Agreement establishes an “exclusive enforcement mechanism” in which the AEWC is responsible for management and enforcement of the strike limits and the provisions of the AEWC Management Plan on subsistence whaling by the AEWC member whaling captains and crews (See Sections 4 *Management*, and 5 *Enforcement* of the Cooperative Agreement). As further discussed in Section 3.6.1 of the EIS, NOAA reserves the right to assert its federal management and enforcement authorities if AEWC does not fulfill its responsibilities under the agreement (See also Section 2 *Responsibilities* in the Cooperative Agreement). As a practical matter, the AEWC has demonstrated the willingness and capacity to monitor and enforce its Management Plan, as described in Section 3.6.3 of the EIS. The Commissioners are highly knowledgeable whaling captains who hold positions of high esteem and responsibility in their communities. NOAA and NMFS (as the implementing agency) have seen no evidence that the AEWC is failing to uphold the terms of the Cooperative Agreement and the AEWC Management Plan.

Humane Method of Take (HMT)

This section includes comments about the efficiency and humaneness of contemporary whaling methods and technology.

HMT01

Additional information about hunting methods is needed to assess the humaneness of the hunt. NMFS should consider placing an observer on whaling vessels to directly document methods and time to death.

Response:

From its formation in 1977, the AEWG has taken steps to improve hunting efficiency (that is the ratio of whales landed to whales struck and lost) and effectiveness of hunting technology (that is, the certainty that a whale struck will be dispatched quickly). The original terms of the AEWG Management Plan in 1977 required registration of whaling captains, including information regarding their qualifications. The Management Plan also required that the subsistence hunt be conducted in a traditional harvesting manner, including the standard that a whale must be secured by a harpoon and line, before the dart gun explosive projectile is used. In addition, the AEWG initiated a whaling hunting technology improvement effort, known as the Weapons Improvement Program.

In the IWC 59 meeting, held in Anchorage, Alaska in May 2007, the U.S. submitted to the Subcommittee on Whale Killing Methods a report prepared by the AEWG documenting the significant increase in efficiency and improvements in whaling weapons technology. The following comments are taken from this report, and additional discussion has been added to the EIS in Section 3.5.

In summary, this report provided a detailed description of the ecological conditions of the modern hunt (i.e. the open ice leads in spring), and contemporary subsistence whaling techniques and technology. The report noted that hunt efficiency has improved steadily from a historic hunt efficiency of approximately 50%, to a recent average of 75% of whales struck being landed, and in some recent years as high as 80% of the whales struck being landed.

The report notes that a shoulder fired darting gun, using a black powder exploding projectile, has been used in Inupiat subsistence whaling for approximately 150 years, since it was introduced by the Yankee commercial whalers in the mid- 19th century. Beginning in 1987, the AEWG and its Weapons Improvement Program Committee worked with Dr. Egil Ole Øen and Henriksed Mek. Verksted of Norway to design, test, and promote use of a penthrite-loaded projectile to improve safety and certainty in use of the dart gun. The new design for penthrite projectiles and modified dart gun barrels were field tested through 2004. Beginning in 2005, training and certification for use of the new technology was phased in. As documented in this report, penthrite projectiles were successfully used in eight bowhead whale takes in 2005, and five in 2006. In these harvests the whales appeared to die instantly or quickly, following detonation of the penthrite projectile. With additional deliveries of penthrite projectiles in fall 2007 and 2008, the AEWG will complete its planned village training sessions.

HMT02

From the definition of a “strike,” and the fact that multiple strikes are made in taking a whale, it appears that the subsistence whalers have exceeded the authorized strike limit.

Response:

In paragraph 13 on aboriginal bowhead whaling, the ICRW Schedule limits the number of bowhead whales landed and the number of bowhead whales struck. This limit is implemented through the annual regulations promulgated by NOAA. The 2007 regulations for the bowhead subsistence hunt, found in Appendix 8.3 of the EIS, state:

For each of the years 2003 through 2007, the number of bowhead whales struck may not exceed 67, except that any unused portion of a strike quota from any year, including 15 unused strikes from the 1998 through 2002 quota, may be carried forward.

Thus it is clear that the regulatory restriction refers to the number of whales struck, not to the number of discrete strikes. The shorthand references to a “strike quota” and “unused strikes” introduce an element of ambiguity because within the ICRW Schedule (1946 as amended in 2007) “strike” means to penetrate with a weapon used for whaling. The text in the EIS has been revised to clarify that the regulations limit the number of whales struck.

Monitoring (MON)

This section includes a comment about ongoing monitoring of a number of bowhead whale population parameters.

MON01

Bowhead population monitoring should continue and be augmented to document any future changes in health, nutrition, reproduction, and survival of bowhead whales.

Response:

We agree. Monitoring of the Western Arctic bowhead population is an essential part of its conservation and management. As noted in the response to comment BEW01, the management agreement provides for a new population estimate every 10 years, and data on additional indices of health of the population are also gathered on an ongoing basis. This population has been extensively monitored for over two decades by Alaska Eskimos, NMFS, and the international scientific community, among others. It is one of the most extensively studied populations of whales and will continue to be so.

NEPA (NEP)

This section includes comments about compliance with NEPA provisions in the development of the Draft EIS.

NEP01

NMFS violated NEPA by seeking approval of a bowhead whale subsistence quota from the IWC prior to complying with NEPA.

Response:

NMFS properly initiated an environmental review under NEPA of its proposed issuance of annual quotas to the Alaska Eskimo Whaling Commission for a subsistence hunt on bowhead whales, consistent with the catch limits for aboriginal subsistence whaling adopted by the IWC. The proposed action by NMFS is a federal agency action subject to NEPA review. In contrast, the U.S. negotiating positions at the IWC are advanced by the U.S. Commissioner to the IWC; the U.S. Commissioner is appointed by the President and serves at his pleasure. The U.S. Commissioner is not a federal agency. Negotiating positions advocated by the U.S. Commissioner on behalf of the U.S. are not final agency actions; these positions may change during the course of negotiations. The U.S. negotiating positions advocated before the IWC, moreover, may or may not be adopted by the IWC, and any attempt to analyze effects on the human environment would be speculative. The proper application of NEPA is to actions by NOAA, not the U.S. IWC Commissioner, when NOAA acts under the Whaling Convention Act. For these reasons, the NEPA requirements for environmental review do not apply to the U.S. negotiating positions before the IWC.

NEP02

NMFS must include full disclosure of all relevant information, data, analyses, and other evidence that may be included in the documents tiered to in the Draft EIS, in order to provide for an adequate assessment of the environmental impacts.

Response:

The EIS cites the relevant scientific literature and, as appropriate, environmental reviews and technical documents produced by NMFS and other federal agencies. In preparing the EIS, data and analyses from the relevant scientific literature were examined in order to insure that the document is complete and current. References are cited to identify the source for specific points of fact or analysis, and the pertinent information is summarized in the EIS. It is not reasonable to suggest that for every reference cited there must be an extensive abstract of the entire source document. In addition, the question of “tiering” from other documents is moot, as this EIS does not purport to “tier” from other environmental reviews. See the response to NEP03 for additional information.

NEP03

The Draft EIS improperly relies on tiering to at least nine different NEPA documents and ESA biological opinions in violation of NEPA and Council on Environmental Quality (CEQ) guidance on when tiering is appropriate.

Response:

As noted in the comment, CEQ guidelines define when it is appropriate for an environmental review document to “tier” from a larger and broader environmental review document. This EIS does not purport to tier off of other environmental review documents and the term “tiering” does not appear in the EIS. More specifically, the bowhead whale subsistence harvest regulations proposed by NMFS and reviewed in this EIS are not subsidiary to a more general programmatic action in the form of MMS energy development decisions reviewed in another set of environment review documents. Instead, the MMS environmental review documents are cited for the information they provide, primarily in the area of cumulative effects - that is action outside of the proposed action which may have additive and synergistic effects alongside the proposed action. These are properly part of the cumulative effects analysis in this EIS, and the EIS would be deficient if it failed to consider these other actions, including the environmental reviews of those actions.

NEP04

NMFS must state the duration of the EIS.

Response:

As noted in Section 1.1.1, this EIS reviews a proposed action by NMFS to issue annual quotas to the AEWG for the subsistence of harvest of bowhead whales from the Western Arctic stock for the years 2008 through 2012. This corresponds to the period for which the International Whaling Commission has authorized a block quota for aboriginal subsistence whaling. The duration of the EIS is therefore for the five years of the proposed action. Any IWC block quota for the subsequent period beginning in 2013 would be implemented by NMFS in a new proposed action subject to a new NEPA environmental review. Additional language has been added to the EIS to clarify this point.

Public Participation (PPN)

This section includes comments on the adequacy of opportunity for public participation.

PPN01

By denying the request for an extension, NMFS failed to provide an adequate opportunity for the public to locate and review tiered documents cited in the Draft EIS and to comment on the Draft EIS.

Response:

We disagree. The public comment period for the Draft EIS was more than adequate. The public comment period on the Draft EIS was 70 days, well beyond the legal minimum of 45 days required under NEPA. The additional period of 25 days to submit comments on this Draft EIS

was deemed appropriate. This EIS addresses no new significant issues. NOAA proposes to reauthorize the bowhead subsistence hunt for 2008 through 2012 at the same quota level and strike-limit, as during 2002 through 2007 and endorsed by the IWC. We chose to prepare an EIS rather than an EA so as to provide the public with as much information as we could that was relevant to the decision at-hand. The commenter takes the view that the body of scientific literature cited in the EIS is such that the public could not reasonably examine and comment on the EIS in the period provided. However, the central question of this EIS concerns the population status of the Western Arctic bowhead whale stock and the soundness of the aboriginal subsistence whaling catch limits adopted by the IWC by consensus and proposed for implementation by NMFS. This topic has been the subject of a significant body of published scientific research since the late 1970s. The stock status and aboriginal whaling block quota have been reviewed by the IWC repeatedly since the late 1970s. Similarly, for the cumulative effects issues, e.g., impacts of climate change and oil and gas exploration and development in the U.S. Beaufort and Chukchi seas, these too are topics of extensive and prominent scientific debate and public scrutiny. In addition, a specialist non-governmental organization such as the commenter has reason to be well informed on the relevant issues, independent of the comment period provided for by the DEIS. Among other things, the commenter's correspondence during the scoping period and the comment period indicate that the commenter is well informed of the issues and the history of this matter. Given the modest length of this document and the issues being addressed, NMFS did not see a compelling reason to grant an extension of the comment period.

PPN02

There was inadequate opportunity for meaningful public involvement because additional documents and relevant reports were published or made available after the Draft EIS was completed.

Response:

Additional discussion has been incorporated into the analysis and presented in the appropriate sections of the Final EIS concerning new events and additional information made available to the public after the release of the Draft EIS in July 2007. However, this new information is not such that would require re-opening of the public comment period.

Socio-economic Effects of Whaling (SEW)

This section includes comments on the socio-economic effects of whaling.

SEW01

The EIS does a good job documenting the Alaskan Eskimo tradition of subsistence bowhead whale hunting. It describes in detail the history and cultural aspects of the whaling hunt including how the hunt is an integral part of the social framework of the villages involved.

Response:

Comment acknowledged.

SEW02

The Draft EIS does not discuss the exchange and purchase of non-food portions of the bowhead whale as an important commodity for the Native Alaskan villages involved.

Response:

Qualitative information concerning the exchange and purchase of non-food bowhead whale parts, such as baleen, for use in handicrafts has been developed on consultation with the AEWC and the Inupiat History, Language and Culture Commission. Additional discussion has been added to Section 3.5 in the EIS.

Public Comment Letters

Letter from Timothy J. Ragen, Ph.D., Executive Director, Marine Mammal Commission, September 20, 2007. 2 pages.

Letter from D.J. Schubert, Wildlife Biologist, Animal Welfare Institute, October 12, 2007. 30 pages, plus attachments.

Letter from Harry Brower, Chairman, Alaska Eskimo Whaling Commission, October 12, 2007. 2 pages.

Letter from Christine B. Reichgott, Manager, NEPA Review Unit, Environmental Protection Agency, October 12, 2007. 2 pages.

MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 905
BETHESDA, MD 20814-4447

20 September 2007

Douglas P. DeMaster, Ph.D.
Attn: Ellen Sebastian
National Marine Fisheries Service
709 West 9th Street
P.O. Box 21688
Juneau, AK 99802-1668

Re: Bowhead Whale DEIS

Dear Dr. DeMaster:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Draft Environmental Impact Statement on issuing annual quotas to the Alaska Eskimo Whaling Commission for the subsistence hunt of bowhead whales from 2008 through 2012. Based on our review, we offer the following comments and recommendation.

At its May 2007 meeting, the International Whaling Commission (IWC) adopted a five-year subsistence whaling quota for bowhead whales for the years 2008 through 2012. The quota allows up to 280 whales to be landed over that period, with up to 67 strikes per year and an additional 15 unused strikes in any given year to be carried over to the following year. This is the same quota that was adopted by the IWC for the previous five-year period. Native communities in Alaska and Russia share the bowhead whale quota, the Alaska Native share being 255 whales landed over the five-year period. Consistent with these provisions, the National Marine Fisheries Service proposes to authorize landings in accordance with the Alaska Native share of the IWC quota and its strike and carry-over stipulations.

The DEIS provides a thorough discussion of the status of the bowhead whale population; subsistence whaling by Alaska Natives; local, federal, and international management of the harvest; and the likely effects of whaling under the proposed quota on the bowhead whale population, the environment, and the Alaska Native whaling communities. Among other things, the DEIS notes that the most recent census of western Arctic bowhead whales, conducted in 2001, resulted in an estimated abundance of 10,545 whales. This reflects an increase of about 3.4 percent a year between 1978 and 2001. Given this abundance and trend, we believe the effect of the hunt under the proposed quota will be minor and will not prevent the regional bowhead whale population from continuing to increase toward its optimum sustainable population level. The hunt has been well managed, and the Marine Mammal Commission therefore concurs with the proposed action and recommends that the National Marine Fisheries Service adopt the bowhead whale subsistence quota as proposed.

We also note that the monitoring program for bowhead whales has done an excellent job of providing reliable information on the population's abundance and trends. Continuing this program

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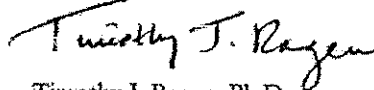
PHONE: (301) 504-0087
FAX: (301) 504-0099

Douglas P. DeMaster, Ph.D.
20 September 2007
Page 2

is particularly important given the dramatic effects of climate change and shrinking sea ice coverage off Alaska and other arctic areas in recent years and the anticipated changes in future years. These changes will no doubt alter bowhead whale habitat, both directly and as a consequence of growing human activities in the region. Bowhead whale reproduction, nutrition, health, and survival may be affected and, for that reason, the Marine Mammal Commission also recommends that (a) monitoring efforts to assess population size and trends be maintained through the upcoming quota period, and (b) those efforts be augmented to document any future changes in health, nutrition, reproduction, and survival of bowhead whales.

Please contact me if you or your staff has questions regarding these recommendations.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director



ANIMAL WELFARE INSTITUTE

PO Box 3650 Washington, DC 20027-0150 www.awionline.org
telephone: (703) 836-4300 facsimile: (703) 836-0400

September 25, 2007

BY ELECTRONIC AND REGULAR MAIL

Dr. Douglas P. DeMaster
Attn: Ellen Sebastian
National Marine Fisheries Service
709 W. 9th Street
P.O. Box 21688
Juneau, AK 99802-1668

Dear Dr. DeMaster:

On behalf of the Animal Welfare Institute (AWI), I am writing to request a 60-day extension in the deadline for public comments on the Draft Environmental Impact Statement for Issuing Annual Quotas to the Alaska Eskimo Whaling Commission for a Subsistence Hunt on Bowhead Whales for the Years 2008 through 2012 (hereafter DEIS). This request is needed to ensure that the public has a sufficient opportunity to properly review, and evaluate the DEIS and to subsequently prepare substantive comments in response to the analysis. Additional justifications for this request are presented below.

The current deadline for public comment on the DEIS is October 12, 2007. If this request is granted – as it should be – the revised deadline for public comment would be December 12, 2007. If, however, a 60-day extension is deemed unacceptable, then, at a minimum, AWI would ask that the National Marine Fisheries Service to extend the comment deadline for 30 days or until November 12, 2007 to facilitate public review and to satisfy the intent of the National Environmental Policy Act (NEPA).

This request is warranted and justified for the following reasons:

1. The opportunity for public review and comment on federal agency plans and projects that impact the quality of the human environment is the most important component of the NEPA process. Regulations implementing NEPA that were promulgated by the Council on Environmental Quality and which are applicable to all federal agencies both require that “environmental information is available to ... citizens before decisions are made and before actions are taken” and that “public scrutiny (is) essential to implementing NEPA.” 40 CFR §1500.1(b). In addition, it is the responsibility of each federal agency to “encourage and facilitate public involvement in decisions which affect the quality of the human environment.” *Id.* at §1500.2(d). In recognition of these requirements, the requested 60-day extension is entirely consistent with the intent of NEPA which, first and foremost, is to involve the public in an agency’s decision-making process.

2. The existing comment period is inadequate given the large scope of issues and impacts discussed in the DEIS or relevant to the subject matter analyzed in the DEIS. The current comment period of 70-days is not sufficient to provide the public with an adequate opportunity to fully review the DEIS, to obtain and review the studies and/or other planning documents cited or referred to in the DEIS, to identify and evaluate other information – including newly published reports – of relevance to the Arctic environment and the bowhead whales that were not cited in the DEIS, and to facilitate the preparation of substantive comments in response to the DEIS. An additional 60 day extension in the comment deadline until December 12, 2007 is justified to ensure that interested members of the public, including scientists, representative of non-governmental organizations, and Native Alaskans can all fully participate in this decision-making process.

More specifically, the requested 60-day extension in the deadline for comments on the DEIS is essential to facilitate public involvement in this process because:

A. The document under review is an environmental impact statement which, theoretically, provides the most comprehensive level of review of the environmental impacts of an agency's proposed action and other reasonable alternatives to that action. This is the first time that NMFS has prepared an EIS on this particular subject. In 2002, when it first evaluated the impact of the aboriginal subsistence whaling on bowhead whales, NMFS did so in an environmental assessment which, by regulation, does not provide as comprehensive an analysis as an EIS.

B. The DEIS cites to several scientific studies that are relied on to substantiate many of the facts or claims in the analysis. Some of these studies are available in more common scientific journals (e.g., *Marine Fisheries Review*, *Report to International Whaling Commission*) while others are available from more obscure journals (i.e., *Journal of the Acoustical Society of America*, *Artherosclerosis*, *Ekologiya*) that can be difficult to find or access.

C. The DEIS refers or tiers to at least four other environmental impact statements, environmental assessments, or biological opinions relevant to the discussion and analysis of the direct, indirect, and cumulative effects of oil/gas exploration and development activities on whales and their habitat in the Arctic. See DEIS at 27, Section 3.2.8. Though NMFS provides the relevant URLs where these documents can be accessed, each is lengthy and detailed requiring considerable time to review and evaluate. Moreover, each of these documents cite to other studies/reports that also may be relevant for consideration in preparation of comments on the DEIS.

D. Several lawsuits challenging the legality of oil/gas exploration activities and/or questioning the sufficiency of environmental impact analyses or the adequacy of government decisions have been filed. Recently, a court ruled in favor of plaintiff organizations who challenged a decision made by the government to allow Shell to engage in oil/gas exploration activities in the Beaufort Sea. The public needs additional time to investigate such lawsuits and to acquire the factual evidence relied on by both plaintiffs and defense in substantiating their claims in order to determine if such evidence is relevant to the analysis in the DEIS.

E. The Mineral Management Service (MMS) is responsible for managing the nation's natural gas, oil, and other mineral resources on the Outer Continental Shelf. The MMS

website (www.mms.gov) contains an abundance of information relevant to oil and gas exploration in Alaska within the habitat of the bowhead whale. The public requires an extension in the DEIS comment deadline to allow for a sufficient examination of the information on the website that may be relevant to the issues under review in the DEIS.

F. An abundance of new information has recently become available in regard to the significant adverse impacts of global climate change or global warming on the Arctic environment, the wildlife of the Arctic, and the ecology of the entire region. For example, in a press release dated September 6, 2007, the National Oceanic and Atmospheric Administration announced the availability to two new reports on the impacts of global warming on the Arctic ecosystem and its ecology (e.g., State of the Arctic 2006, Arctic Climate Impact Assessment). Moreover, the Norwegian government also recently issued a series of studies on climate change and the Arctic environment. Since the Arctic is already experiencing changes as a result of global climate change, considering that all experts agree that the such changes will be most dramatic and rapid at the poles, and given the direct, indirect, and cumulative effects of climate change on bowhead whales, their habitat and ecology, and Alaskan native whaling, such information is directly relevant to the analysis in the DEIS. An extension in the comment deadline is essential to ensure that the public has a sufficient opportunity to access, obtain, review, and rely on these studies when preparing substantive and informed comments on the DEIS.

3. There is no legitimate justification for not extending the comment deadline by the requested 60 days and any potential inconvenience to NMFS is easily outweighed by likely benefits. Alaskan natives are authorized to hunt, kill, and land bowhead whales under both U.S. law and pursuant to an aboriginal subsistence whaling quota approved by the International Whaling Commission at a special intersessional meeting in October 2002. The existing NEPA analysis and approved quota is valid through the end of 2007 allowing Alaskan natives to hunt bowhead whales during the fall migration. The spring 2008 bowhead whale hunt, if approved by NMFS after completion of this NEPA process, will not begin until April at the earliest. Consequently, if NMFS extends the deadline for the requested 60 days it would still have approximately 120 days to complete the NEPA and quota allocation processes. Moreover, such an extension will benefit NMFS by ensuring that its decision-makers have access to and can consider a full complement of substantive and informed comments submitted by the public upon which to base their final decision. In addition to benefiting the decision-makers, this would also ensure that NMFS has endeavored to provide as much opportunity for public comment as is possible and as is consistent with the intent of NEPA.

For the foregoing reasons, AWI again requests that NMFS extend the deadline for public comments on the DEIS by 60-days or until December 12, 2007. As an alternative, should this request be denied then, at a minimum, NMFS is asked to extend the comment deadline by 30-days or until November 12, 2007. By extending the deadline NMFS will provide the public with additional time to fully evaluate the DEIS, to access and review many of the supporting studies/reports, and to obtain and examine other evidence of relevance to the action. In addition, considering that there is no legitimate reason why the extension should not be granted, that additional time will only improve the decision-making process, and given the intent of NEPA in

*Animal Welfare Institute
Dr. Douglas P. DeMaster
September 25, 2007
Page 4*

regard to facilitating public participation as an "essential" element in the NEPA process, the requested extension should be granted.

Thank you in advance for considering this request. Please contact me by e-mail (susan@awionline.org), telephone (703-836-4300), or telefax (703-997-1134) should you have any questions about this matter and/or with your response to this request. If possible, please notify me as to your decision in response to this request by September 28, 2007.

Sincerely,



Susan Millward
Research Associate

cc: Dr. William Hogarth, Director, National Marine Fisheries Service
Mr. Steven K. Davis, Project Manager, National Marine Fisheries Service

From Susan Millward <susan@awionline.org> ▶
Sent Tuesday, September 25, 2007 2:25 pm
To bowhead-DEIS@noaa.gov , Douglas.Demaster@noaa.gov
Cc Steven.K.Davis@noaa.gov , william.hogarth@noaa.gov
Subject Draft Bowhead Whale EIS
Attachments AWI_DEIS_ExtRequest09-25-07.pdf 62K

Please see the attached letter requesting an extension to the comment period for the Draft Bowhead EIS.
I would appreciate an acknowledgement of receipt of this email.

Thanks,

Susan Millward
Research Associate
Animal Welfare Institute

<https://vmail4.nems.noaa.gov/frame.html?&security=false&lang=en&popupLevel=undefined&char...> 9/28/2007



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October 12, 2007

BY ELECTRONIC AND REGULAR MAIL

Dr. Douglas P. DeMaster
Attn: Ellen Sebastian
National Marine Fisheries Service
709 W. 9th Street
P.O. Box 21688
Juneau, AK 99802-1668

Dear Dr. DeMaster and Ms. Sebastian:

On behalf of the Animal Welfare Institute (AWI), we submit the following comments on the Draft Environmental Impact Statement for Issuing Annual Quotas to the Alaska Eskimo Whaling Commission for a Subsistence Hunt on Bowhead Whales for the Years 2008 through 2012 (hereafter DEIS).

Based on a careful review of the DEIS and the process and procedures relevant to its preparation and publication, AWI asserts that the National Marine Fisheries Service has violated federal law by:

1. Prematurely seeking approval of a bowhead whale quota from the International Whaling Commission (IWC) prior to complying with the National Environmental Policy Act;
2. Impairing the ability of the public to meaningfully participate in this decision-making process by failing to extend the comment period on the DEIS as requested and is consistent with the intent of NEPA;
3. Failing to consider a reasonable range of alternatives in the DEIS;
4. Improperly relying on tiering to past environmental documents thereby failing to properly disclose in the DEIS all of the relevant information pertinent to a comprehensive review of the environmental impacts of the proposed action and its alternatives;
5. Failing to adequately evaluate the direct, indirect, and cumulative impacts of the proposed action and its alternatives in the DEIS by, in particular, downplaying the significant potential adverse impacts of oil/gas exploration and acquisition activities including ocean noise, non-oil and gas exploration and production related ocean noise, vessel traffic and its associated noise impacts, and climate change;

6. Ignoring other critical information and/or failing to provide an analysis of discussion of other relevant legal and scientific issues in the DEIS.

For these reasons, the DEIS fails to meet the legal standards imposed by NEPA and, at a minimum, either must be withdrawn and replaced with a far more substantive and comprehensive analysis or a supplement to the DEIS must be published to address the deficiencies in the current document.

As a preface to its comments on the DEIS, AWI desires to clearly articulate that it opposes whaling. Unlike many organizations that distinguish between aboriginal and commercial/scientific¹ whaling, AWI does not. AWI's opposition to whaling is due to the indisputable fact that it is impossible to "humanely" kill a whale. Indeed, despite years of research by those attempting to devise a more rapid means of killing whales, no technique or tool has proven effective in "humanely" killing a whale by instantaneously or nearly instantaneously rendering the animal incapable of feeling pain. Given the proven intelligence of whales, their sentience, their communication skills and complex social organization, whaling has no place in the modern world and should be relegated to the history books. Moreover, considering that the majority of the great whales have not recovered to so-called pre-exploitation population sizes, considering that our estimates of such pre-exploitation sizes may not be accurate and/or represent "best guesses," recognizing that despite years of study we still know relatively little about the life histories, biology, ecology, and behaviors of whales, and in light of the myriad and increasing anthropogenic threats to whales and their habitats (i.e., climate change, pollution, coastal development, vessel traffic, oil/gas exploration, ocean noise including active sonar use), whaling represents an ongoing threat that is most easily mitigated.

This is not to say that AWI has no respect for the needs of the Inuits or native Alaskan Eskimos who, as reported in the DEIS, have engaged in whaling for subsistence purposes for over 2000 years. AWI recognizes the need for some native people to engage in whaling in order to survive and consequently, does not oppose aboriginal subsistence whaling provided that the following conditions are met:

- (A) such whaling fulfills a legitimate and continuing subsistence need;
- (B) such killing is limited to only the number of whales need to satisfy the legitimate subsistence needs of the people conducting the hunt, their immediate family members, and other native people in their village of residence who also have a legitimate subsistence need for whale products;
- (C) the targeted whale population can sustain such kills;

¹ Though some may distinguish between commercial and scientific whaling, AWI does not. Considering that the products of whales killed allegedly for "scientific" research are sold, such killing constitutes commercial whaling.

- (D) the killed whale or whales be fully utilized by those responsible for his/her death as specified in (B) and provided that none of the meat, blubber, or other edible portions of the whale can be sold and that none of the non-edible portions, including native handicrafts, are sold in violation of the MMPA, ESA, or the Convention on International Trade of Endangered Species of Wild Flora and Fauna;
- (E) that whaling be done using the least cruel techniques available;
- (F) continuing efforts are made to reduce the time till death and thus the cruelty of the hunt.

At present, based on the best available information, some of these conditions are satisfied by the Alaskan bowhead whale hunt while others are not. Some of the conditions of concern will be subject to further discussion and analysis in this comment letter.

In regard to the issue of legitimate subsistence need, while we question whether there remains a true subsistence need for whaling and whale products for all inhabitants of all villages that currently kill bowhead whales, we understand that the IWC and U.S. government has recognized such a need and has permitted the killing of bowhead whales under internationally established quotas for nearly 30 years. We also question whether all of the traditional practices relevant to whaling by the Inuits or native Alaskan Eskimos continued to be followed at present. For example, the DEIS indicates that during the autumn hunts the Inuits/Eskimos use aluminum skiffs or small boats with outboard motors during the whale hunts while, during the spring hunts the traditional umiaks (seal or walrus-skin covered boats) are used. In addition, there is concern that some of the whaling vessels may be equipped with outboard motors to facilitate the hunt. Such motorized crafts were not available historically to hunt whales and, if the traditional cultural aspects of whaling are as important as they are portrayed to be, then the application of such modern conveniences which simplify and expedite whaling should not be used.

Conversely, if the Inuits/Eskimos are allowed to whale AWI fully supports their use of the most modern killing tool to reduce the cruelty of the hunt. While this distinction between using traditional methods to pursue a whale and using modern weapons to kill a whale may appear to be a double standard, it is not. Federal law, including both the Endangered Species Act and Marine Mammal Protection Act, requires the humane killing of bowhead whales (a federally listed endangered species) necessitating the use of modern killing equipment. There is no federal law, however, that allows the use of outboard motors or modern vessels in pursuing whales during so-called traditional subsistence hunts.

Though AWI opposes whaling, including subsistence whaling unless specific conditions are met, it recognizes that subsistence whaling by Inuits/Eskimos has occurred, it has

been virtually uninterrupted for over 2000 years, and that international and national approval has been given authorizing the continuation of such killing.² AWI, however, shares the serious concerns expressed by the Inuits/Eskimos in regard to the short and long-term threats to bowhead whales, other marine mammals in the region, the Arctic ecosystem, and their indigenous lifestyles as a result of threats of global climate change, oil/gas exploration and development, pollution, and increased vessel traffic. AWI commends the Alaska Eskimo Whaling Commission, individual villages, native village leaders, local politicians, and individual native villagers for their ongoing efforts through the courts, media, and public opinion to contest the destruction of the Arctic environment and their very way of life.

The remainder of this comment letter will address both general and specific deficiencies in the DEIS and the process/procedures followed by NMFS in developing this document.

1. NMFS violated NEPA by failing to satisfy its NEPA obligations prior to seeking IWC approval of its bowhead whale quota:

NMFS contends that it had no obligation to comply with NEPA before seeking IWC approval for its bowhead whale quota at IWC/59 in May 2007. Specifically, it claims that US negotiating positions at the IWC are not subject to NEPA. DEIS at 12. This self-serving interpretation of the requirements of NEPA is simply wrong. The basic premise or mandate of NEPA is that federal agencies are required to examine the environmental impacts of their actions before implementing those actions. In other words, an agency is supposed to "look before it leaps." NEPA does not permit an agency to "look while leaping" or to "look after it has leapt." In this case, requesting a bowhead whale quota from the IWC was inextricably intertwined with the U.S. government's interest in allowing the Inuits/Eskimos to continue to kill bowhead whales after 2007.³ While the act of requesting the quotas may not have had any significant environmental impacts, the indisputable and inextricable connection between the request and action mandated NMFS to complete its NEPA obligations prior to IWC/59.

Information in the DEIS further demonstrates the connection between the request and the action providing additional evidence that NMFS blatantly violated NEPA by attempting to satisfy its NEPA obligations only after seeking the quota. For example, throughout the DEIS NMFS indicates that the Whaling Convention Act (WCA) is the preeminent statute

² In contrast, the Makah tribe located in northwest Washington have no legitimate subsistence need to kill whales, have not engaged in whaling (with the exception of killing one whale in 1999 and the illegal killing of another in 2007) in over 80 years and the IWC has not recognized its subsistence needs.

³ NMFS was advised of its violation of NEPA by seeking IWC approval of its aboriginal subsistence whaling quotas prior to completing its NEPA obligations in a letter submitted by Friends of the Gray Whale and other organizations in May 2007. A copy of that letter, which is hereby incorporated by reference in its entirety, is appended to this comment letter as Attachment 1.

that governs whaling. The WCA very clearly specifies that any whaling allowed in the US must be in compliance with the International Convention for the Regulation of Whaling (ICRW). The WCA, however, does not take precedence over NEPA which is a separate statute requiring agencies to consider the environmental impacts of their plans, projects, or programs before approving any action. By seeking IWC approval for the bowhead whale quota to comply with the terms of the WCA, the US has effectively predetermined the outcome of the NEPA process since it is irrational and illogical to believe that the US would expend the resources and time⁴ to obtain the quota from the IWC only to deny allocation of the quota as a result of its post-IWC NEPA compliance efforts. The repeated reference to the IWC approval of the bowhead whale quota in the DEIS, including in support of the proposed action, provides additional evidence that the NMFS decision to allow the Inuits/Eskimos to kill bowhead whales from 2008 through 2012 was made at the IWC meeting and that the current NEPA process is simply a make-work exercise designed to justify a decision already made.

By publishing its DEIS after IWC/59 NMFS has not only predetermined the outcome of the process but has also illegally segmented the analysis and denigrated the role of the public in the process. Indeed, in this case, NMFS proceeded with efforts to meet its NEPA obligations only after securing the bowhead whale quota from the IWC. By doing so, the public had absolutely no means of participating in the NMFS decision-making process as to whether to seek a quota from the IWC at all or what size quota it should have requested. To suggest, as NMFS has, that the public has no legitimate right to participate in the NMFS decision to even seek a quota from the IWC is indicative of an intentional misinterpretation of NEPA to purposefully avoid public input on how, what, or if the US should have sought a quota in an international fora. The fact that the IWC is an international body is irrelevant since the decision to be made – whether to seek a quota required to allow the Inuits/Eskimo to whale and what size quota to seek – is strictly up to NMFS.

Had NMFS complied with NEPA and solicited public comment on the DEIS prior to IWC/59, the public would have had an opportunity to submit additional evidence on, for example, the various and increasing anthropogenic threats to the bowhead whale and its habitat that may have provided NMFS with cause to, at a minimum, consider requesting a smaller quota. Similarly, had the DEIS been subject to public review prior to IWC/59 the

⁴ Though not specifically quantified, anecdotal information suggests that NMFS expended considerable time and resources, including significant amounts of federal tax dollars, to obtain the bowhead quota at IWC/59. Indeed, obtaining the quotas (primarily bowhead but also gray whale) was the primary objective of the US at IWC/59 and was used by the US as an excuse not to take the lead in advocating for resolutions to provide greater protection for whales throughout the world. Because of the failure of the US to secure the bowhead quota at the IWC's 2002 meeting in Shimonoseki, Japan it appeared to spare no expense in sending its representatives around the world to meet with and influence other governments to support its aboriginal subsistence whaling quota requests at IWC/59.

public could have provided comment on the Inuit/Eskimo needs statement possibly causing NMFS to either increase or decrease its requested quota. By illegally delaying the release of the DEIS, NMFS has effectively undermined the public's opportunity to critique the needs statement as NMFS is likely to disregard such comments by claiming that the statement has already been accepted and approved by the IWC.

Had NMFS not repeatedly referenced the IWC's approval of the quota in the DEIS, it would have provided the appearance that the DEIS represented a fresh and objective examination of the environmental impacts associated with the proposed action and its alternative. Instead, by including the IWC references, NMFS simply confirmed the illegality of the procedures used in this case, demonstrated its disregard for the public comment provisions of NEPA, and demonstrated that it has predetermined the outcome of this NEPA process.

2. NMFS has Failed to Provide an Adequate Opportunity for Public Comment on the DEIS.

The Council on Environmental Quality's regulations implementing NEPA (which are applicable to all federal agencies) make clear that "public scrutiny are essential to implementing NEPA," 40 C.F.R. 1500.1(b), and that federal agencies must "encourage and facilitate public involvement in decision which affect the quality of the human environment." *Id.* at 1500.2(d). Even NMFS recognizes the importance of public involvement in this decision-making process. For example, on page 10 of the DEIS, NMFS claims that its decision to prepare an EIS to evaluate the impacts of the bowhead whale hunt was "to take advantage of the EIS's longer process and to provide greater transparency and opportunity for public review of its administration of the bowhead subsistence whaling program."

In this case, NMFS has failed to provide an adequate opportunity to allow meaningful public involvement in this decision-making process by limiting the time available for the public to review and analyze the DEIS. This failure is particularly troublesome since: 1) this is the first time ever that NMFS has evaluated the environmental impacts of the bowhead whale hunt in an environmental impact statement (and only the second time NMFS has subjected the hunt to review under NEPA); 2) because the DEIS cites to a large number of studies including highly technical documents requiring additional time to review and analyze; 3) because the DEIS tiers to nine other NEPA documents or ESA consultation reviews to substantiate many of its claims; and 4) because additional documents/reports of relevance to the DEIS were published or made available after the DEIS was completed and during the comment period.

AWI requested a 30-60 day extension in the comment deadline in a letter dated September 25, 2007. Though it requested a decision on that request by September 28,

2007, only on October 10 did NMFS respond to the request and a subsequent e-mail seeking a decision. At that time, Steve Davis, of the NMFS Alaska Regional Office, indicated that the request was denied because NMFS has to complete the Final EIS by January in order to publish a Record of Decision (RoD) before a planned meeting with the AEWC and others in Alaska in February and because NMFS believes the DEIS is adequate and complies with NEPA. Neither of these reasons justifies the denial of the request for an extension in the comment deadline.

First, the public's opportunity to comment on the DEIS should not be impaired or hindered to satisfy a meeting schedule imposed by NMFS. Considering that the spring whale hunt, if authorized, wouldn't begin until April at the earliest, there is no compelling reason why a RoD has to be published in February. Furthermore, there is no reason why NMFS could not delay the February meeting and/or schedule a second meeting in March or early April to engage the AEWC and others in discussions pertaining to its decision, to finalize any management plans or cooperative agreements relevant to the decision, or to take other actions depending on the final decision made.

Second, while it is not surprising that NMFS believes the DEIS to be comprehensive and legally sufficient, that has nothing to do with whether the comment period should have been extended. Indeed, the entire purpose of the comment period is for the public, including scientists and those who support or opposed the proposed action, to review and critique the adequacy of the DEIS. NMFS is then required to consider such input and to make such input available to its decision-makers before they make a final decision on how to proceed. The fact that NMFS would reject a reasonable request for an extension in the comment deadline based, in part, on the claim that its DEIS is legally sufficient provides additional evidence that NMFS has predetermined the outcome of the NEPA process, that it has no intention of seriously considering public comments, and that its solicitation of public comments was done only to meet its legal obligations under NEPA.

Though AWI disagreed with this initial rejection of its request for a 30-60 day extension in the comment deadline, it subsequently sought a minimal two-week extension in the deadline in separate letters to Dr. William Hogarth and Secretary of Commerce Carlos M. Gutierrez and NOAA Administrator Conrad Lautenbacher dated October 10 and 11, respectively. AWI has received no response to these requests.⁵

AWI continues to believe there is ample support for extending the comment deadline or, as is the case now, for reopening the comment period for at least 30 additional days. In addition to the extra time necessary to review the literature cited in the DEIS (and the relevant studies that may have not been cited), the decision by NMFS to tie to several

⁵ AWI has attached all three letters to this comment (Attachments 2, 3, and 4) and asks that they be included in the official administrative record for this NEPA process.

other NEPA and ESA related documents though likely illegal (see below) further justifies the reopening of the comment period. In addition, the release of several studies relevant to the threats of global warming to the arctic environment which are directly relevant to the viability and management of bowhead whales after completion and publication of the DEIS and during the comment period necessitates that the public be given additional time to review the studies and to integrate its findings into substantive and informed comments on the DEIS. Ironically, the availability of the majority of these reports, including the Arctic Climate Impact Assessment were publicized by a September press release issued by NOAA. More recently, the U.S. Fish and Wildlife Service provided notice in the Federal Register of the availability of a series of U.S. Geological Service reports on polar bears and arctic ecosystems which may also contain information relevant to bowhead whales particularly in regard to climate change and its impact on sea ice and the arctic food web which is of such significant importance both to bears and to bowhead whales and other marine mammals.

For these reasons, for the reasons articulated in Attachments 2, 3, and 4, and in deference to the importance of public comment to the NEPA process, AWI requests that NMFS immediately publish notice in the federal register reopening the comment period on the DEIS for at least 30 but preferably 60 days. If NMFS chooses not to comply with this request, AWI reserves the right to submit supplementary comments after the current deadline and/or to submit comments in response to the Final EIS. Please note that NEPA explicitly allows the public to submit comment after publication of the Final EIS and before a final decision is made (i.e., RoD). See 40 C.F.R. 1503.1(b).

3. NMFS has Failed to Consider a Reasonable Range of Alternatives:

The CEQ's NEPA implementing regulations specify that the development and consideration of alternatives "is the heart of the environmental impact statement." 40 C.F.R. 1502.14. The NEPA process is to be used "to identify and assess the reasonable alternatives to proposed action that will avoid or minimize adverse effects of these actions upon the quality of the human environment." *Id.* at 1500.2(e). To do this, federal agencies must "rigorously explore and objectively evaluate all reasonable alternatives..." "devote substantial treatment to each alternative considered in detail ..." and "include reasonable alternatives not within the jurisdiction of the lead agency." *Id.* at 1502.14(a, b, c).

Contrary to this legal standard, the DEIS essentially considers only two alternatives – killing whales (Alternatives 2, 3, and 4) or not killing whales (Alternative 1 – No Action Alternative).⁶ Though there are slight differences between Alternatives 2, 3, and 4 each

⁶ Alternative 1, which would not authorize any subsistence killing of bowhead whales, is identified as the environmentally preferred alternative.

of these alternatives allows at least 67 bowhead whales to be killed each year. The sole difference between these alternatives is in regard to how many unused strikes can be rolled over to the following year with Alternative 2 allowing none, Alternative 3 allowing up to 15, and Alternative 4 allowing up to 33.

As an initial matter, Alternative 4 is not a reasonable alternative because it is illegal. Since the WCA is the US law that regulates whaling and since it apparently requires compliance with decisions made by the IWC⁷ and does not explicitly provide the US with any discretion to implement decisions more liberal than those adopted by the IWC, the US cannot independently elect to allow for a rollover of up to 33 unused strike as this is inconsistent with what was approved by the IWC (i.e., 67 strikes per year, cap of 255 whales over the course of 5 years, with provision for up to 15 unused strikes to be rolled over to following year). If NMFS believes it has the discretion to implement decisions more liberal (i.e., allowing more whales to be killed) than approved by the IWC, it must disclose and discuss its authority for doing so including, but not limited to, citing to the relevant laws providing it with such authority. Otherwise, NMFS must concede that Alternative 4 is unreasonable and remove it from consideration.

Conversely, though AWI supports neither Alternative 2 nor 3, both are reasonable alternatives but are, for all intents and purposes, the same because they both permit at least 67 whales to be killed. The fact that Alternative 2 is more conservative than that which was approved by the IWC is not an issue since its selection would ensure that the number of whales killed each year is below the maximum number authorized by the IWC (compared to Alternative 4 which could potentially exceed that maximum number). In addition, since the Inuits/Eskimos have not killed anywhere near 67 whales in recent years, Alternatives 2 and 3 are not sufficiently distinct to represent separate Alternatives. NMFS concedes this point in Tables ES-2 and ES-3 in the DEIS (pages ES-9 and ES-11) which specifies that the impact of Alternative 3 for each variable or factor considered is identical to the impacts listed for Alternative 2. Had NMFS actually provided a reasonable range of alternatives, the impacts of each would be variable and different.

For example, NMFS should have seriously evaluated alternatives that set different limits on the number of strikes to be authorized each year and/or on the number of whales killed. Instead of limiting its analysis to alternatives that allowed a minimum of 67 whales to be struck and killed, it should have included an alternative limiting the strike/kill amount to 25, 35, or 45 whales. Or, it should have considered the number of actual number of strikes and whales killed by year over the past 10 years, obtained an average, and considered an alternative proposing to allow that average numbers of strikes and/or whales to be killed. Such alternatives, if considered, would have resulted in a

⁷ As summarized in the DEIS, page 6, "The Whaling Convention Act defines aboriginal subsistence whaling as whaling authorized by paragraph 13 of the Schedule annexed to and constituting a part of the ICRW (International Convention for the Regulation of Whaling)."

range of different environmental impacts depending on the variable or factor under consideration and, therefore, would have provided the public with a more distinct set of alternatives to review and would have facilitated the public's understanding of the continuum of environmental impacts ranging from no action to the most liberal of the alternatives evaluated.

The disclosure and analysis of a set of distinct alternatives (versus the current set of nearly identical alternatives) is consistent with the intent of NEPA which explicitly requires the assessment of "reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment." 40 C.F.R. 1500.2(e). Since the proposed action in the DEIS is to allow up to 67 strikes per year resulting potentially in the mortality of up to 67 whales, to "avoid or minimize adverse effects" of the proposed action any alternative (independent of the no action alternative) would logically have to allow for far less strikes and consequently less potential whale mortality. The current set of action alternatives (2, 3, and 4) do not meet this standard.

Instead of seriously considering a distinct set of alternatives, NMFS "considered but discarded" alternatives that both substantially decrease and increase the annual and five-year bowhead whale subsistence quotas for Alaska Eskimos. DEIS at 14. For reasons articulated above, any alternative that significantly increases the quota would not be reasonable and, therefore, would be impermissible. NMFS failed to provide any additional explanation or rationale for why an alternative that substantially cut the annual quota should not have been seriously considered preferring instead to simply discard any further consideration of such an option.

The only way that NMFS can correct this deficiency is to publish a new EIS providing analysis of a truly reasonable range of alternatives or provide a supplement to the existing DEIS addressing this deficiency. Alternatively, if NMFS believes there is a legitimate reason why it need not consider an alternatives that significantly reduces the annual quota, it is required to provide that rationale. If NMFS elects instead to finalize the DEIS and issue a RoD it will have violated the very "heart" of the NEPA process by avoiding the consideration of reasonable alternatives that would minimize the impacts of its proposed action.

4. NMFS has Failed to Disclose all Relevant Information as to the Direct, Indirect, and Cumulative Impacts of the Proposed Action and its Alternatives and has Improperly Tiered to Other Environmental Documents

A. NEPA requires that "environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. 1500.1(b). Such information is to be of "high quality" and its analysis must be

scientifically accurate. *Id.* The primary purpose of an EIS is to “provide full and fair discussion of significant environmental impacts and ... (to) inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” *Id.* at 1502.1. Under NEPA impacts are synonymous with effects and include the direct, indirect, or cumulative effects (or impacts) of the action and its alternatives on the environment.⁸

When preparing an EIS, agencies are encouraged to avoid duplication, repetition, or needless detail. Yet, the agencies must ensure detailed discussion and focus on the actual issues ripe for decision. One way to avoid amassing needless detail is to tier to previously published environmental documents. The CEQ regulations provide the following requirements regarding tiering:

“Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action.” 40 CFR 1502.20.

Additional guidance on tiering is provided in the CEQ’s 40 most Frequently Asked Questions about NEPA:

“Tiering is a procedure which allows an agency to avoid duplication of paperwork through the incorporation by reference of the general discussions and relevant specific discussions from an environmental impact statement of broader scope into one of lesser scope or vice versa. In the example given in Question 24b, this would mean that an overview EIS would be prepared for all of the energy activities reasonably foreseeable in a particular geographic area or resulting from a particular development program. This impact statement would be followed by site-specific or project-specific EISs. The tiering process would make each EIS of greater use and meaning to the public as the plan or program develops, without duplication of the analysis prepared for the previous impact statement.”

⁸ Effects include “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.” 40 CFR 1508.8. Direct effects are caused by the action and occur at the same time and place. *Id.* Indirect effects are caused by the action but occur later in time or farther removed in distance but are still reasonably foreseeable. *Id.* Cumulative effects refers to the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” *Id.* at 1508.7. Cumulative effects “can result from individually minor but collectively significant actions taking place over a period of time.” *Id.*

Finally, even more guidance on the use of tiering to minimize the duplication or repetition of information in environmental documents was provided by the CEQ in a memorandum entitled "Guidance Regarding NEPA Regulations" published in the Federal Register in 1983 (48 FR 34263). Relevant sections of this guidance is provided here.

"Tiering of environmental impact statements refers to the process of addressing a broad, general program, policy or proposal in an initial environmental impact statement (EIS), and analyzing a narrower site-specific proposal, related to the initial program, plan or policy in a subsequent EIS."

"Tiering, of course, is by no means the best way to handle all proposals which are subject to NEPA analysis and documentation. The regulations do not require tiering; rather, they authorize its use when an agency determines it is appropriate. It is an option for an agency to use when the nature of the proposal lends itself to tiered EIS(s)."

"In the context of NEPA, "major Federal actions" include adoption of official policy, formal plans, and programs as well as approval of specific projects, such as construction activities in a particular location or approval of permits to an outside applicant. Thus, where a Federal agency adopts a formal plan which will be executed throughout a particular region, and later proposes a specific activity to implement that plan in the same region, both actions need to be analyzed under NEPA to determine whether they are major actions which will significantly affect the environment. If the answer is yes in both cases, both actions will be subject to the EIS requirement, whether tiering is used or not. The agency then has one of two alternatives: Either preparation of two environmental impact statements, with the second repeating much of the analysis and information found in the first environmental impact statement, or tiering the two documents. If tiering is utilized, the site-specific EIS contains a summary of the issues discussed in the first statement and the agency will incorporate by reference discussions from the first statement."

"In summary, the Council believes that tiering can be a useful method of reducing paperwork and duplication when used carefully for appropriate types of plans, programs and policies which will later be translated into site-specific projects."

It is clear both from the language of the relevant CEQ regulations and from the additional CEQ guidance that the use of tiering is appropriate when an agency is evaluating identical or closely related actions at different scales (i.e., broad and site-specific). For example, tiering would be appropriate for the Minerals Management Service in regard to its proposal to facilitate oil/gas exploration and development activities through lease

sales. While AWI strongly opposes such sales, the development of a broad programmatic EIS evaluating the environmental impacts of several proposed lease sales over a large geographic areas followed by the publication of site-specific environmental documents for individual sales is precisely the type of circumstance where the MMS could tier to the programmatic EIS to avoid replication and duplication in the site-specific documents.

In regard to the DEIS, NMFS tiers to a minimum of nine different NEPA documents and ESA Section 7 biological opinions presumably to avoid duplication of information. Specifically, it tiers to these documents to provide "extensive information about the effects of oil and gas activities on bowhead whales"⁹ and in regard to the past actions relevant to the cumulative effects analysis.¹⁰ In reality, since NMFS failed to provide sufficient time for the public to locate, obtain or print, and review each document (all of which are lengthy and technical) tiered to in the DEIS, NMFS has avoided disclosure of information critical to understanding and assessing the environmental impacts of the proposed action and its alternatives. To make matters worse, NMFS simply tiers to the document, identifies the document by names and/or provides a citation, but fails to provide specific page numbers for the relevant information in each document to facilitate and expedite the public review.

Of course, NMFS was not permitted to avoid disclosing such information by tiering to these documents since the DEIS on bowhead whale killing is not sufficiently related to any of those documents. For example, though there may be some areas of commonality between the DEIS and those documents to which it is tiered, those documents represent separate decisions on separate issues (e.g., killing whales versus allowing oil/gas developments). Contrary to both the NEPA regulations and CEQ guidance on tiering (which allow tiering only when an agency prepares both a broad, programmatic environmental document and related site-specific documents), the DEIS is not a site-specific version of any of the document that NMFS has tiered to in the DEIS. Had NMFS prepared a programmatic EIS on bowhead whale hunting throughout northern Alaska and then prepared site-specific environmental documents to assess the impacts of whaling by individual villages, tiering would be appropriate. That is not the case here.

⁹ The documents identified in the DEIS are (1) a Biological Opinion prepared by NMFS for the MMS pursuant to section 7 of the Endangered Species Act on Oil and Gas Leasing and Exploration Activities in the Beaufort Sea, Alaska (NMFS, 2006); 2) Environmental Impact Statement prepared pursuant to NEPA for the Beaufort Sea Planning Areas, Oil and Gas Lease Sale, Sales 186, 195, and 202 (MMS, 2002); 3) an Environmental Assessment prepared by the MMS for proposed Outer Continental Shelf (OCS) Lease Sale 202 – Beaufort Sea Planning Areas (MMS, 2006b); and 4) Final Programmatic Environmental Assessment Arctic Ocean OCS Seismic Surveys 2006 (MMS, 2006c).

¹⁰ The documents identified in the DEIS are (1) Arctic Ocean OCS Seismic Surveys Programmatic EA (MMS, 2006c); (2) Chapter 4 of the Alaska Groundfish Draft Programmatic SEIS (NMFS 2004); (3) Steller Sea Lion Protection Measures SEIS (NMFS 2001b); (4) Setting the Annual Subsistence Harvest of Northern Fur Seals on the Pribilof Islands EIS (NMFS 2005); and (5) the Draft Steller Seas Lion and Northern Fur Seals Research Programmatic EIS (NMFS 2007).

Consequently, NMFS has no choice but to issue a new EIS or supplement the existing EIS to include full disclosure of all of the relevant information, data, analyses, and other evidence that may be included in the documents tiered to in the DEIS. This would benefit NMFS and its decision-makers by ensuring that all relevant information was included in a single document. Though the new document would be more substantive and lengthy, the public would also benefit by not having to locate, copy, and review nine other documents to understand and evaluate the full range of impacts relevant to the proposed action and its alternatives in the DEIS. At present, the DEIS is woefully deficient because NMFS has illegally tiered to unrelated documents to avoid disclosure of information critical to the analysis and, as a result, has compromised, perhaps purposefully, the public's ability to sufficient analyze the impacts of the proposed actions and its alternatives and to prepare and submit informed and substantive public comments on the DEIS.

B. NMFS estimates that there are currently 10,545 bowhead whales in the Western Arctic population. DEIS at ES-1, 1, and 18. This estimate was made in 2001 or approximately 6 years ago. Considering the ongoing and increasing changes to the Arctic environment as a result of anthropogenic influences, namely global climate change, increased oil/gas exploration and development, increase in invasive species, etc... this estimate may no longer be valid. While the population size could have increased it also may have decreased as is the case with the Eastern North Pacific gray whale population.¹¹ In the case of the gray whale, though there are different interpretations of the data, many are cautioning that what is happening to the gray whale is indicative of substantial shifts in the health of the arctic ecosystem as a consequence of global warming which is altering the entire food web forcing gray whales to swim further in search of adequate supplies of amphipods and other foodstuffs. Could similar impacts be affecting the bowhead whale? Are more bowhead whales being identified as skinny? Has calf production increased or decreased in recent years? None of these issues are evaluated in the DEIS.

NMFS claims that the current estimated bowhead population size is between 46 and 101 percent of the Western Arctic population's pre-exploitation abundance of 10,400 – 23,000. What NMFS fails to disclose is any explanation of the specific methodology it uses to count whales, any assumptions inherent to that methodology, strengths and weaknesses of the techniques used, or how the pre-exploitation abundance was calculated. The limited information that is provided suggests that bowhead population estimates are based largely on ice-based counts of spring-migrating whales passing Point Barrow and Barrow, AK supplemented with the use of acoustic arrays. DEIS at 18.

¹¹ As disclosed in the DEIS, abundance estimates for gray whales have declined from 29,758 in 1997/98 to 18,178 in 2001/02. Recent reports of a number of skinny whale and reduced calf numbers suggest that the population has declined even more since 2001.

What is not disclosed is what correction factors are used (and how such factors were calculated) to compensate for whales missed by observers (i.e., whales not recorded, whales traversing Point Barrow at night, or whales migrating further off-shore) or how NMFS translates bowhead whale acoustical data into population estimates. NMFS does cite to various studies that may or may not contain this information but it fails to even summarize such critical information. This is not to suggest that NMFS must recite every specific detail of every cited study, but it must, at a minimum, provide a basic summary of such key issues so that the public, including lay people, can understand how such estimates are developed.

Furthermore, contrary to the obvious bias of NMFS in regard to its belief that the current estimate of Western Arctic bowhead whales may be at or near its pre-exploitation level, its own evidence suggests that the population may in fact not even be half as large as the pre-exploitation levels. The fact that the population is showing no evidence of being near carrying capacity (i.e., density dependent impacts on population growth rates) would suggest that the current population is not near its pre-exploitation high. In addition, the range of 10,400-23,000 disclosed in the DEIS is not the only range of estimates of the pre-exploitation stock size in the scientific literature. For example, Breiwick and Braham (1990) estimated the pre-exploitation population size to be 14,000 to 27,000 while Everhardt and Breiwick (1992) set the pre-exploitation size at 12,000 to 18,000. Finally, considering the recent determination by Alter and Palumbi (2007) that the pre-exploitation size of the Eastern Pacific gray whale population may have been as high as 118,000 or more than five times higher than estimated by NMFS, it is entirely conceivable that the pre-exploitation estimates of the size of the Western Arctic bowhead whales may also be significant underestimates. At a minimum, NMFS needs to concede that this is a possibility or provide additional evidence to substantiate its belief that the current bowhead population may be at or near its pre-exploitation size.

NMFS also fails to provide a sufficient discussion of the genetic structure of this stock of whales and the fact that there remains some scientific disagreement over whether the Western Arctic bowhead whale population constitutes a single population or two. This has been a subject to debate within the Scientific Committee of the IWC in the past and, while many scientists may not agree with the two stock theory, there remain some naysayers. Even NMFS continues to explore the possibility of the two stock theory. See National Marine Mammal Laboratory Cetacean Assessment & Ecology Program, Bowhead abundance, trends, and life history ("the principal hypotheses to be addressed by this study are whether apparent genetic differences reflect the presence of more than one stock of bowhead whales around Alaska."). At a minimum, NMFS has to discuss and disclose the scientific evidence that supports both theories (i.e., one stock versus two stocks) and must consider each possibility when assessing the impact of subsistence whaling on the population or populations.

C. NMFS has failed to disclose and discuss the specific standards relied on by the IWC in regard to aboriginal subsistence whaling and how those standards are applicable to the alleged subsistence needs of the Inuits/Eskimos.

The IWC's 1982 ad hoc Technical Committee Working Group on Development of Management Principles and Guidelines for Subsistence Catches of Whales by Indigenous (Aboriginal) Peoples, defines "*Aboriginal subsistence whaling*" as whaling "*for purposes of local aboriginal consumption carried out by or on behalf of aboriginal, indigenous or native peoples who share strong community, familial, social and cultural ties related to a continuing traditional dependence on whaling and on the use of whales*". The key determinant as to whether a group can qualify for aboriginal subsistence whaling is whether the group can demonstrate a continuing traditional dependence on whaling and the use of whales. While the IWC's definition does not discount community or cultural benefits of whaling, it is the alleged subsistence need that is most important and relevant. An alleged cultural need alone does not allow for whaling either under IWC standards or US law.

In the DEIS, NMFS claims that IWC member countries adopted, by consensus, the following definition of subsistence use at the 2004 annual meeting.

1. The personal consumption of whale products for food, fuel, shelter, clothing, tools, or transportation by participants in the whale harvest.
2. The barter, trade, or sharing of whale products in their harvested form with relatives of the participants in the harvest, with others in the local community or with persons in locations other than the local community with whom local residents share familial, social, cultural, or economic ties. A generalized currency is involved in this barter and trade, but the predominant portion of the products from each whale are ordinarily directly consumed or utilized in their harvested form within the local community.
3. The making and selling of handicraft articles from whale products, when the whale is harvested for the purposes defined in (1) and (2) above.

AWI questions the assertion in the DEIS that the definition above was adopted by consensus at the 2004 IWC meeting. AWI was present at the meeting and did not observe such the IWC member countries adopting this definition by consensus and can find no evidence to suggest that the definition was adopted at all. Based on its research and observations at the relevant meetings, AWI believes that the aboriginal subsistence whaling subcommittee discussed the definition but did not agree on formally adopting it nor did it recommend to the IWC plenary that it adopt the definition. The Chair's report from the meeting states that the subcommittee acknowledged a definition of 'subsistence use' that had been developed by a panel in 1979 and which was included in the

subcommittee's report. The subcommittee then asked the plenary to adopt its report by consensus but, other than adopting the report by consensus, there is no evidence that the subcommittee or plenary explicitly agreed to the definition of subsistence use reiterated above and contained in the DEIS. Even if this definition was adopted, it must be noted that it doesn't contain any allowance for whales to be taken to satisfy cultural needs as part of a subsistence hunt.

While the IWC's alleged definition of subsistence use would seemingly allow the sale of whale products with relatives, local residents, or others with various connections to the local residents, regulations implementing the WCA prohibit any person from selling or offering for sale whale products from whales taken in aboriginal subsistence hunts, except for articles of Native handicrafts which may be sold or offered for sale. DEIS at 7. The prohibition against selling whale meat/blubber and other products, with the exception of native artifacts is also included in the DEIS at 51 ("meat and edible products must be used exclusively for consumption and not be sold or offered for sale") and in the Cooperative Agreement between the AEWC and NMFS ("The AEWC Management Plan will provide that the meat and edible products of bowhead whales taken in the subsistence hunt must be used exclusively for native consumption and may not be sold or offered for sale"). DEIS at 145.

The DEIS claims that the Inuits/Eskimos have a subsistence need for whaling and whale products based on a more than 2000 year tradition of whaling. The fact that Alaskan Inuits/Eskimos may have a 2000 year old tradition of whaling is one thing but providing that each of the ten whaling villages has a legitimate and ongoing subsistence need for whales and whale products is entirely different. Historical needs may or may not reflect modern day needs. For example, Barrow, AK can hardly be considered a traditional whaling village. It is the largest community, both in terms of geography and human population in Northern Alaska. Barrow residents have access to many of the same foodstuffs as individuals living in the lower 48 states. For these reasons, it is unclear if the native residents of Barrow continue to have a legitimate subsistence need for bowhead whales and whaling. Instead of simply claiming that the ten whaling villages all have a legitimate subsistence need for whale products and expecting the public to agree, NMFS must disclose additional information about each village to prove that whale products are crucial to meet the subsistence need of the village natives.

Of equal concern is the repeated reference to the cultural importance of whaling in the DEIS. For example, on page ES-13 of the DEIS NMFS cites to the "diminished social cohesion occasioned by the shared work among whaling crews" as a potential adverse impact of the no action alternative. Another example is found on page 3 of the DEIS, "the bowhead subsistence hunt is a large part of the cultural tradition of these communities and their modern cultural identity." Such statements, though possibly accurate, are irrelevant to the analysis at hand since cultural needs alone are not grounds

to permit whaling under either international standards or US law. It is imperative that NMFS make this distinction to ensure that the relevant standard – subsistence – is the focus of the analysis in the DEIS. Any attempt by NMFS (beyond its efforts to date to amend the IWC's 1982 ad hoc Technical Groups definition of subsistence use) to blur the lines between subsistence use and cultural needs is inappropriate and unacceptable given the dangerous precedent such efforts may cause both within the US and internationally.

Cultural issues can be summarized but should not be considered by the NMFS decision-makers when making a final decision on the proposed action or in evaluating any of its alternatives. For example, if NMFS determines that the Inuits/Eskimos could meet their subsistence needs by killing a maximum of 45 whales per year, it should not allow up to 67 whales to be killed per year to address some alleged cultural need.

D. NMFS must provide a more detailed description of the whaling strategies and killing methods used by the Inuits/Eskimos. The DEIS provides only minimal information about the methods/strategies used by the Inuits/Eskimos to kill whales including the use of traditional harpoons and/or modern weapons. What is not disclosed is any information about how long it takes struck/shot whales to die and whether such whaling is conducted in a humane manner. The DEIS does describe the fall and spring migration of the bowhead whales, indicates that different whaling villages tend to whale at different times of the year depending on whale availability, that autumn/fall hunts involve the use of aluminum skiffs or small boats with outboard motors while spring hunts involve the use of the more traditional umiaks (seal or walrus-skin covered boats). DEIS at 47. Since 1973 the annual number of bowhead whales landed by Alaskan natives has ranged from 8 in 1982 to 55 in 2005 while the number struck and lost (i.e., not landed) has ranged from 5 in 1999 to 82 in 1977. DEIS at 24. The percentage of whales struck and lost has decreased from approximately 50 percent before 1978 to about 75 percent more recently. DEIS at 49.

Federal law requires that whaling, including subsistence whaling carried out by Alaskan Inuits/Eskimos, be conducted humanely. Without additional information as to the methods used by the Inuits/Eskimos it is impossible for the public or the NMFS decision-makers to assess the "humaneness," or lack thereof, inherent to the hunt.

In particular, NMFS must provide a description of the specific weapons used and disclose whether the specific weapons are capable of killing or only injuring a whale when used alone or in combination with other weapons, and the time to death of each whale killed by weapon or combination of weapons. Since NMFS, by law, is supposed to receive information for each whale killed, presumably time to death and weapon information would be available. If such information is not presently required, NMFS must include the requirement that such evidence be collected in its revised cooperative agreement with the AEWC. Moreover, even if the information on time to death and weapons used is not

currently collected, NMFS must request that the AEWG survey its registered whaling captains to collect such information for disclosure and analysis in the Final EIS, in a new EIS, or in a supplement to the DEIS. Neither NMFS nor the public should assume that the Inuit/Eskimo whale hunt is humane – as is required by federal law – based solely on any statements provided by the AEWG or whaling village captains. Ideally, NMFS must consider placing an observer on village whaling vessels to directly document the methods used to kill whales and to collect time to death data.

The DEIS, citing to the Code of Federal Regulations, defines a strike as “hitting a whale with a lance, harpoon or explosive device.” What’s unclear is whether, for example, each strike to the same whale is counted as a single strike (based on the single whale being struck) or if all strikes are counted even if it takes more than one strike to mortally wound and kill a whale.¹² In addition, if the technique used by Inuit/Alaskan whalers is to use a traditional harpoon as the first weapon followed by a explosive-tipped harpoon or large caliber bullet, would this constitute one or multiple strikes? Based on the description contained in the DEIS of the methods used by Alaskan Inuits/Eskimos to hunt bowhead whales it would appear that, at a minimum, each whale killed is struck twice – first with a harpoon with a line and float attached with the “shoulder gun” used as a backup. DEIS at 47. If this is the case then with 75 strikes allocated to the Inuit/Eskimos the maximum number of whales that would be killed each year would be 37.5 and, thus, if more whales are killed then it is possible that the strike limit has been exceeded. AWI believes that the intent of the IWC in establishing a strike limit is for each strike to be counted individually even if it requires multiple strikes to kill a single whale.

This is crucial information since it directly affects the number of whales that can be landed each year. If the Alaskan Inuits/Eskimos are limited to 75 strikes (as they were in 2006 (see 71 FR 7539)), and a minimum of two strikes (e.g., traditional harpoon followed by large caliber ammunition or explosive-tipped harpoon) are used per whale, then only a maximum of 37 whales could be killed each year. If more than two strikes are required to kill each whale then the number of whales that can be killed each year is reduced even further. Without such strike data and/or without disclosure of the methods the Inuits/Eskimos use to kill whales, neither the public nor decision-makers can determine if the whaling is “humane” as required by US law and/or assess the actual impact of the whale hunt on the whale population.

E. NMFS fails to disclose sufficient information about other wildlife potentially directly or indirectly impacted by the proposed action or its alternatives. In its analysis of the no-action alternative, NMFS claims that a cessation of bowhead whale hunting would

¹² In the September 8, 2007 incident involving the illegal killing of a gray whale by five members of the Makah tribe, the whale was reportedly struck with 5-10 harpoons and 16-21 bullets which eventually led to the whale’s death. Depending on how strikes are counted, this corresponds to either one strike (because only a single whale was struck) or 21-31 strikes if each strike was counted individually.

increase pressure on other marine and terrestrial wildlife including caribou, moose, brown bear, Dall sheep, musk ox, arctic fox, red fox, porcupine, ground squirrel, wolverine, weasel, wolf and marmot. DEIS at 40. The DEIS discloses information about some of the potentially affected marine mammals and marine birds but fails to provide any information about the estimated population size, population trends, current subsistence hunting rates, and anthropogenic threats for any of the terrestrial mammals listed above and other whale species (e.g., belugas, orcas, gray whales).

Such information is crucial if the public and decision-makers are to be able to adequately evaluate the consequences, both positive and negative of the no action alternative. For example, if terrestrial wildlife populations in and around the ten whaling villages are in decline due to excessive killing, impacts of global warming, disease, etc... some could believe that allowing whaling would reduce pressure on such populations. If such terrestrial wildlife populations were healthy, however, this could support a cessation in bowhead whale hunting or a reduction the allocated quota given to the AEWC to distribute to the whaling villages. The same would be applicable to other whale species (i.e., belugas, orcas, minke whales) that may be present permanently or seasonally off the northern and northwestern coast of Alaska.

Without such data, the public is expected to trust the analysis of NMFS and to believe its conclusions. NEPA is not intended to be used to force feed alleged facts to the public without providing evidence to substantiate such claims. The DEIS presently fails to provide much of that evidence.

Information about current subsistence hunting rates and trends is also critical to assess the veracity of the NMFS claim that a reduction or cessation in whaling will lead to an increase in pressure on other marine mammal or terrestrial species. Since the number of whales taken each year in the past is not consistent, the NMFS theory would suggest that when whale take is down, the killing of other wildlife should increase. If such a cause and effect relationship is not seen, then the NMFS theory is likely wrong. If hunting trend data suggests that subsistence hunters have increased their hunting/killing activities across the board, this would call into question whether a cessation of whaling would substantially increase pressure on other wildlife.

The data that is provided in the DEIS is not sufficient to answer these questions. In some cases, according to NMFS, population estimates are not available though its not clear if NMFS even attempted to contact the Alaska Department of Fish and Game to determine if it has any current population estimates. In other cases, NMFS provides both population estimates and past and/or present subsistence hunting takes.

For spotted seals, NMFS states at a reliable estimate of spotted seal numbers, trends, and stock structure is not available. DEIS at 32. Subsistence kills of spotted seals has

increased from 850-3,600 seals taken annually between 1966 and 1976 (DEIS at 32 citing Lowry 1984) to 5,265 seals per year as of August 2000 (DEIS at 32 citing Angliss and Outlaw 2005). Similarly, no abundance, trend, or stock structure information is available for bearded seals though the species is important for Alaskan subsistence hunters with an estimated annual kill of 6,788 seals (DEIS at 33 citing Angliss and Outlaw 2005). For ribbon seals, no reliable estimate of abundance, trend, or stock structure is available but subsistence kills have increased from less than 100 seals annually between 1968 to 1980 (DEIS at 33 citing Burns 1981b) to an estimated 193 per year more recently (DEIS at 33 citing Angliss and Outlaw 2005). The same lack of population information is applicable to the ringed seal though its annual subsistence kill rate is estimated to be 9,567 seals. DEIS at 34. For the Pacific walrus, whose population size is unknown, subsistence kill rates are estimated at 5,789 animals per year.

Population estimates are available for the polar bear populations in the area evaluated in the DEIS including 2000-5000 bears estimated in 1998 from the Chukchi/Bearing seas population and 2,272 bears in the southern Beaufort Sea stock. The number of bears killed from the former stock was nearly 45 bears annually through 2000 but the current kill rate is not disclosed. For the Beaufort Sea stock, 55.1 bears are killed annually. The DEIS does not specify if this killing is done for subsistence purposes or by trophy hunters as well. DEIS at 35.

Beluga whale population estimates range from 2,133 whales in the Bristol Bay stock to 39,258 whales in the Beaufort Sea stock. An additional 3,710 whales are estimated to exist in the eastern Chukchi Sea with another 18,142 in the eastern Bering Sea. Subsistence hunters are estimated to have killed a minimum of 65 and 53 beluga whales annually between 1999 and 2003 though more recent kill statistics are not provided. DEIS at 37. For minke whales, an estimated 936 whales were observed in the central Bering Sea in 1999 though this is only a small portion of their total range. Minke whale abundance trend data is not available for Alaskan water (DEIS at 37 citing Angliss et al., 2001). Similarly, population trends for killer whales or orcas are unknown for the eastern North Pacific Alaska resident stock though the estimated number of whales is 1,123. NMFS reports no subsistence killing of orcas or harbor porpoise in Alaska. DEIS at 38. Harbor porpoise population trends are also not known.

The lack of complete lack of data on some of the species including caribou, moose, brown bears, musk ox, fox, Dall sheep, porcupines, wolf, ground squirrels, wolverines, weasels and marmots that could be affected by a shift in subsistence kills if bowhead whale hunting was stopped or reduced is problematic and illegal as it prevents an accurate assessment of potential impacts. Though NMFS lists all of these species as being subject to hunting by subsistence hunters it provides no explanation as to why it failed to provide any population data, trend data, current subsistence kill data, or threat information for any of the species. In other cases, such as for many of the seal species,

the amount of subsistence kills including, in some cases, a sizable increase in kill numbers in combination with the reported subsistence kills of bowhead whales raise questions about the sheer amount of edible product being produced, who is consuming all of that edible material, and whether the killing of all of those animals is necessary to satisfy a legitimate subsistence need. The level of subsistence killing is particularly alarming considering that the number of Alaskan natives has declined by 300 people from 2000 to 2007. DEIS at 40. Additional analysis of the kill statistics is provided below.

F. NMFS must provide a more detailed explanation of the difference between Potential Biological Removal and Q, under what circumstances PBR or Q is appropriate for assessing the impact of human-caused mortality, and why, in this case, the Q procedure supercedes the use of PBR.

The determination of PBR is considered an upper limit guideline for fishery related mortality. It is defined in 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." DEIS at 54. Though originally intended to be a measure of the impact from fisheries related mortality to marine mammals, the PBR has been used as the basis for measuring the magnitude of mortality from other anthropogenic sources. The PBR calculation ($PBR = N_{min} \times 0.5 \times R_{max} \times Fr$) ostensibly identifies the level of mortality (excluding natural mortality) that is considered to be sustainable. Based on the most recent (2001) population estimate, the PBR for the Western Arctic bowhead population is 95 whales ($9472 \times .02 \times 0.5$). Though the recovery factor is normally set at .1 for any endangered species (such as the bowhead whale), NMFS has elected to use .5 in its PBR calculation because the bowhead whale population continues to allegedly increase in size despite subsistence killing. NMFS provides no further justification for the use of .5 instead of .1 despite the fact that the resulting PBR values are significantly different (15 when .1 is used and 95 when .5 is used). These values, of course, assume that the population estimate is accurate which, without further disclosure of the methodologies and assumptions used in making such estimates, is questionable.

Another deficiency in the PBR value is that it does not encompass natural mortality. It is assumed that the division of the R_{max} value by .5 is intended to compensate for any natural mortality ensuring that as long as human caused mortality does not exceed the PBR the level of mortality will be sustainable. Considering how little is known about age-specific survivorship or mortality in bowhead whales, DEIS at 25 citing Heidel and Albert (1994), it is unclear if the PBR equation adequately compensates for or considers natural mortality. As a result, until age and sex-specific mortality rates are known, any PBR may overestimate the amount of human-caused mortality that is sustainable when such mortality is combined with natural mortality.

A second method for determining a catch limit for whale populations is referred to in the DEIS as "Q." The Q catch control rule "allows the proportion of net production allocated to recovery to increase as a population becomes more depleted and decrease for a population above MSY (maximum sustained yield) and approaching carrying capacity (K)." DEIS at 20. NMFS claims that the use of the Q rule is more appropriate for the bowhead whale than the use of the replacement yield value because the Western Arctic population of bowhead whales is believed to be close to K with a high probability of being above the MSY level based on the 2001 population estimate. DEIS at 20. This determination ignores the fact that, as even NMFS concedes, the current Western Arctic bowhead whale population may not even be 50 percent as large as its pre-exploitation size. Not surprisingly, the Q rule results in a so-called sustainable removal number of up to 257 bowhead whales a year, higher than the replacement yield value of 108-123 whales, and the PBR of 95 whales.

It is not at all clear why NMFS has elected to utilize the Q value as its baseline estimate of sustainable off-take in the DEIS except for the obvious reason that by using the Q value of 257 whales (range of 155 to 412) NMFS can claim that the current level of subsistence take is far lower than the Q value (averaging 41 whales over the past decade) and, therefore, is of little consequence to the population. If, however, NMFS intends to take a precautionary approach to the analysis of the impacts of the subsistence hunt as it has done in other areas of the DEIS (e.g., assuming that all 67 strikes permitted each year result in 67 whale mortalities) it is inexplicable why NMFS would not use the PBR as its baseline value.¹³ NMFS must provide a more detailed analysis of why it chose to use the Q value over the PBR and how that choice is consistent with the legal mandates governing the management of marine mammals. In addition, if it continues to rely on the Q value, it must provide a more detailed and clear description of how it is calculated, what assumptions are inherent in the calculation, and how it provides a more useful baseline than the values provided by using replacement yield or PBR. Again, simply citing a study in the DEIS to substantiate the existence of the Q value is not sufficient. NMFS must provide a summary of the background of the Q value and explain how it is calculated in the text of the DEIS.

NMFS also claims that because subsistence whaling is managed under the authority of the WCA "the aboriginal subsistence whaling provisions in the IWC Schedule take precedence over the PBR estimate for the purpose of managing the Alaska Native subsistence harvest from this stock." This statement would suggest that the WCA take precedence over the MMPA in regard to the management of marine mammals subjected to a subsistence hunt authorized by the IWC. There is no explicit provision of either the

¹³ In contrast to the DEIS, NMFS does rely on the PBR in assessing the impact of human-caused mortality on the Western Arctic stock of bowhead whales in its 2006 bowhead whale stock assessment (Angliss and Outlaw 2006).

WCA or MMPA that substantiates this statement and NMFS has failed to provide any additional discussion or analysis of the relationship between the WCA and MMPA. Such an explanation is clearly mandated and must provide a legal basis for this claim that the WCA takes precedence over the MMPA thereby facilitating the use of the more liberal Q value in place of the PBR.

G. The analysis of the socio-economic environment is incomplete. NMFS reports that there are 6,333 Alaskan natives (including people who are part native) currently residing in the ten AEWG whaling villages including 2,687 who reside in Barrow, AK. DEIS at 40. Over the past ten years the ten communities combined have killed 410 bowhead whales for an average of 41 per year. Over half of the total whales killed were killed by the Native villages of Barrow, AK. DEIS at 42. According to the DEIS this number of whales produced 1,030,113 pounds of edible products which corresponds to 157 pounds of edible product per capita of the Alaskan native population (including part natives) living in the ten communities in 2000. Based on the lower 2007 number of Alaskan natives (6,333), the updated per capita estimate is actually 162.66 pounds (1,030,113/6333) which corresponds to .44 pounds of meat per day/native (man, woman, or child). If it is assumed that 85.5 percent of households in each of the ten villages use bowhead whale products (average of 74 and 97 percent of bowhead use as disclosed on page 44 of the DEIS) and that and that only households with Native Alaskans (including part Native Alaskans) consume bowhead whale products then approximately 5415 of the 6333 Native Alaskans consume bowhead whale products. For those persons the total amount of edible bowhead product available per capita is 190 pounds which corresponds to .52 pounds per person per day.

When total amount of meat for all species killed by subsistence hunters is considered (DEIS at 43, Table 3.5-3), the per capita (Alaska natives and part natives) amount is significant and, frankly, far more than can possibly be consumed each day. If all ten villages are considered¹⁴ and assuming all 6,333 Native Alaskans consume the meat

¹⁴ To estimate subsistence kill levels by species group for Diomedea, Gambell, Point Hope, and Savoonga the native populations of those villages was compared to the villages with similar population sizes listed in Table 3.5-3. The population of Diomedea was comparable to Wales. While the population in Gambell, Point Hope, and Savoonga was comparable to double the population in Kivalina. Based on the population comparison it was assumed that similar number of people would kill similar numbers of species from the different species groups. For Gambell, Point Hope and Savoonga the Kivalina hunt levels were doubled since the population in Kivalina is more than half of the native populations recorded in Gambell, Point Hope and Savoonga. Admittedly, since the doubling the population in Kivalina results in a number that is approximately 100 more than the populations in Gambell, Point Hope, and Savoonga this assumption will slightly overestimate the amount of meat from subsistence hunt available per capita.

obtained from subsistence kills, the total amount of meat available each year per person is approximately 9,483 pounds which corresponds to nearly 26 pounds per person per day.¹⁵ The daily consumption of that amount of meat is simply impossible for any human being including those living in the far north who may not have access to other foodstuffs taken for granted by those in the lower-48 states and the larger cities in Alaska. This calculation raises serious questions about the alleged subsistence need for bowhead whales and other wildlife species. Such questions include who is consuming such a significant quantity of meat? Is meat being wasted and discarded? Is meat being fed to sled dogs or other domestic animals? Can meat obtained for subsistence purposes, including the edible products from bowhead whales, be used to feed dogs and other domestic animals? At a minimum, NMFS must provide additional information about the sheer quantity of meat apparently produced as a result of the subsistence killing of bowhead whales and other animals and, based on such an analysis, revisit the alleged subsistence need for bowhead whales.

Though the relevant laws allow for the sharing of edible products of bowhead whales with Alaskan natives who reside in Alaska but not in any of the ten whaling villages but who continue to be integrated in "sharing networks," DEIS at 55, the calculation of subsistence need is limited to the Native Alaskans residing in the ten whaling villages. See DEIS, Appendix 8.1). The alleged needs of those natives who do not reside in any of the ten whaling villages are thus irrelevant in terms of the calculation of need.

At present, the subsistence need of an aboriginal village is allegedly based on a method adopted by the IWC in 1986. DEIS at 46. Efforts to find any official IWC document describing this method have been unsuccessful to date. The citation provided in the DEIS (Appendix 8.1) is not to the actual IWC document but rather refers to the 2007 supplement to the "Quantification of Subsistence and Cultural need for Bowhead Whales by Alaska Eskimos" produced by Braund et al. The alleged IWC approved method "incorporates the historic and current size of the Eskimo population residing in Alaskan subsistence hunting villages and the number of bowhead whales historically landed by each community." DEIS at 46. To calculate said need, the mean number of whales landed per capita over the base time period (set as 1910-1969) is multiplied by the number of Alaskan natives in each whaling village. See Appendix 8.1, DEIS at 139.

This methodology makes no sense as it is based on historical number of people and whales killed that may no longer be indicative of a level of need. Indeed, many factors may have changed over time. For example, without data on the historical kill of other marine or terrestrial mammal species, it is impossible to compare current subsistence kill rates for all species to the historical data. Moreover, there is little question that modern-

¹⁵ Even if the assumptions made for Diomedea, Gambell, Point Hope and Savoonga were excluded from the analysis, the amount of meat per person per day for the six remaining villages (based on the data presented in Table 3.5-3) is nearly 11.5 pounds.

day Alaskan natives, particularly in the larger villages, have access to additional foodstuffs that were not available historically. This would correspond to a reduced need for bowhead whale products compared to the historical need. It is also unclear why the baseline for the calculation of the Eskimo population and the number of whales landed is set using data from 1910-1969 versus using more recent human population estimates and landed whale data.

For example, as indicated in Table 1, the need for landed whales was based on the human native population in each village for the past ten years along with the number of whales landed over that time period, the resulting need is far less than that calculated in Appendix 8.1.

Table 1: Landed bowhead whales needed based on human native population and landed bowhead whale data from 1997 – 2006.

Community	Total ¹⁶ Eskimo Population	Number ¹⁷ of Landed Bowhead Whales	Mean Landed Whales Per Capita	2007 Alaska Native Population	2007 Bowhead Need Landed (rounded)
Barrow	26870	234	.0087	2687	23.4
Diomedes	1240	2	.0016	124	.2
Gambell	6320	14	.0022	632	1.4
Kaktovik	2320	32	.014	232	3.2
Kivalina	3720	0	0	372	0
Nuiqsut	3660	33	.0090	366	3.3
Point Hope	6360	30	.0048	636	3.1
Savoonga	6640	25	.0037	664	2.5
Wainwright	4840	38	.0078	484	3.8
Wales	1360	2	.0015	136	.2
Total	63330	410	.0533	6333	41.1

As indicated in Table 1 the total number of landed whales needed to meet the subsistence need of the ten whaling villages, using the formula allegedly approved by the IWC with a

¹⁶ This number was calculated by multiplying the 2007 Alaska native population estimate (see DEIS at 41; Table 3.4-1) by ten. This assumes that the native population in each village has remained stable over the past ten years. This assumption may underestimate but likely overestimates the total Native Alaskan population size in each village over the decade since, in most cases, the Native population has likely increased over time. For the purpose of this demonstration, however, this assumption is acceptable. This calculation also assumes that at least one whale was landed in each village in each of the years during the past decade.

¹⁷ From DEIS at 42, Table 3.5-1.

new baseline of the last decade (1997-2006) is 41 instead of the 57 identified in Appendix 8.1. Even if 3 whales were added to this total for the community of Nuiqsut (based on its Native Alaskan population size which is nearly identical to Kivalina) the total of 44 is still well below 57 whales. In addition to providing additional evidence proving that the IWC has approved a methodology for calculating need and explaining that methodology, NMFS must also provide some rationale for why a 1910-1969 baseline is more appropriate for determining need versus a calculating the baseline from data collected during the past decade. Moreover, NMFS must also provide some explanation as to how the alleged need for bowhead whales increased from 56 landed whales per year in 1997 to 57 in 2007 even though the number of native Alaskans in the whaling villages decreased by 300 person between 2000 and 2005.

H. NMFS has failed to adequately disclose or evaluate the direct, indirect, and cumulative impacts of various anthropogenic impacts on the bowhead whales and their habitat. Such anthropogenic impacts include, but are not limited to, oil and gas exploration and production activities and its related noise impacts, vessel traffic and its related noise impacts, and global warming. The adverse implications of each of these threats are serious and significant individually and potentially disastrous when the cumulative effects of each are considered together.¹⁸

The scientific evidence demonstrating that global warming is a threat to the planet is overwhelming. It is no longer a matter of when such impacts will be experienced but, rather, how serious the impacts will be, whether the warming trend can be slowed or stopped, and when, if ever, this will be achieved. Impacts of global warming to arctic ecosystems are and will continue to be particularly severe. Such impacts include: the thawing of permafrost; significant reductions in sea ice; increased frequency of storms; alterations in species distribution, movement, and habitat use patterns; increase in invasive species; increase in disease prevalence and impacts as immunologically naive animals are exposed and infected; changes in ocean circulation patterns and chemistry profiles; increased opportunities for oil/gas exploration and development activities as ice-free conditions expand in duration; increase in vessel traffic due to the reduction in sea

¹⁸ For more information about these impacts AWI has attached a number of reports, petitions, or other comment letters and hereby incorporates these documents in their entirety into this comment letter. The attached documents Chapter 9 on Marine Species from the Arctic Climate Impact Assessment (Attachment 5); the February 22, 2000 Petition to Designate Critical Habitat for the Bering-Chukchi-Beaufort Stock of the Bowhead Whale Under the Endangered Species Act submitted by the Center for Biological Diversity and the Marine Biodiversity Protection Center (Attachment 6); the October 9, 2007 scoping comments of the Center for Biological Diversity on the MMS's notice of intent to prepare a programmatic environmental impact statement for proposed oil and gas lease sales in the Beaufort Sea and Chukchi Sea for years 2007-2012 (Attachment 7); the May 10, 2006 comments of the Natural Resources Defense Council and other on the Draft Programmatic Environmental Assessment for Arctic Ocean Outer Continental Shelf Seismic Surveys - 2006 (Attachment 8); and the Arctic Climate Impact Assessment report on the Impact of a Warming Arctic (Attachment 9).

ice; a disruption to indigenous lifestyles; and a complete disruption of both aquatic (fresh and marine) and terrestrial foodwebs with potentially disastrous consequences to primary producers through the largest terrestrial and marine mammals, including bowhead whales.

In the arctic, many if not all of these impacts are already occurring with no indication that such trends will be reversed anytime soon. These impacts compelled a number of Inuit natives to submit a petition to the Inter American Commission on Human Rights to obtain relief from the inaction by the United States to seriously address climate change impacts, particularly in the arctic.

While global warming has both short term and long term implications to bowhead whales and their habitat, oil and gas exploration and production activities have immediate, direct, and adverse impacts on bowhead whales. In the past several years, oil and gas exploration and production activities in the Bering, Chukchi, and Beaufort Seas have increased exponentially and, based on information contained in the DEIS, will continue to expand as more offshore areas are made available for lease by the MMS. In addition to the inevitable potential for an oil spill due to increased production capacity, exploration activities including the use of 2D and 3D seismic surveys create substantial amounts of ocean noise that can, under certain circumstances, travel significant distances under water and which, as evidenced in the DEIS, results in avoidance behaviors by bowhead whales. Depending on the study, such avoidance behaviors have been detected dozens of kilometers away from the location of the survey. Other behavioral impacts that have been observed include increased swimming speeds, increased breathing frequencies, and a reduction or cessation of feeding activities. These behavioral impacts all affect the bioenergetics of the bowhead whales forcing the animals to use more energy or consume less energy in response to impacts from such seismic surveys. Seismic surveys are not the only source of significant noise associated with oil and gas exploration and production activities. Other sources include noise generated through the act of drilling exploratory or production wells, noise associated with site clearance activities, and noise from vessel traffic including that attributable to oil/gas exploration and other non-oil/gas vessel traffic.

All such noise sources are likely to increase both in intensity and duration in Alaska. Since much of the noise is produced in the spring and summer when bowhead whales are calving, raising their young, and feeding extensively, the potential adverse impacts to the whales is significant and are not limited to behavioral impacts. Such noise impacts can cause the temporary or permanent loss of hearing in bowhead whales and other marine species, can directly or indirectly result in the mortality of many marine species depending on the type of sound, the maximum decibels produced, the frequency and duration of the noise, and how close the victim is to the sound source. For bowhead whales, excessive noise can adversely impact their migration patterns, breeding, feeding,

nursing, and mating activities, their navigational abilities, their ability to avoid predators, and communications between bowhead whales including mothers and their calves. The importance of hearing and communication for bowhead whales is summarized by the National Park Service in a fact sheet on bowhead whales produced by the Bering Land Bridge National Preserve.

“Bowheads evidently sense their surrounding mainly by sound, which travels five times faster and much farther in water than in air. Sounds produced by the environment or by the whales reverberate differently under different ice conditions. Bowheads are excellent navigators of ice-choked waters, although they sometimes get trapped by ice and drown. Bowheads make a wide variety of sounds with a voice covering seven octaves. Like humpbacks, they may “sing” in deep undulating tones, often with two notes at once. During migration they evidently call not only to help navigate but also to maintain cohesion of small herds dispersed over perhaps a dozen square miles.”

Unfortunately, we don't know enough to accurately predict the impact of increased and excessive ocean noise on bowhead whales or other marine species. As a result, the precautionary principle must be applied in this situation requiring NMFS to consider worst-case scenarios when evaluating the direct, indirect, and cumulative of industrial and transportation related activities on bowhead whales, their habitat, and their prey.¹⁹

Specific comments/questions/corrections:

Page	Section	Correction/question
8	1.2.4	The DEIS specifies that the AEWIC provides the first line of enforcement of the MMPA, the ESA, the WCA, and the ICRW and its schedule as specified in the cooperative agreement between the AEWIC and NMFS. NMFS offers no further discussion of this specific provision of the agreement and whether it is, in fact, even legal. AWI is aware of no legal authority that would allow NMFS, a federal agency, to transfer federal law enforcement authority to what is a private coalition representing the interest of traditional Alaskan whaling villages. Does the AEWIC have law enforcement officers? Are they provided with the same training as police officers or NMFS enforcement agents? NMFS must disclose more

¹⁹ Given the insufficient opportunity for public comment on the DEIS, AWI intends to submit an amended version of this comment letter on Monday, October 15 which will contain a much more in depth examination of the adverse effects of ocean noise, oil and gas exploration and production impacts, vessel traffic, and global warming. Considering the earlier erroneous decision by NMFS not to extend the comment deadline, AWI requests that NMFS fully consider the amended comment letter.

information about this arrangement and, in particular, cite to the statute or regulation which allows NMFS to delegate the enforcement of federal laws to a private party.

15 2.5

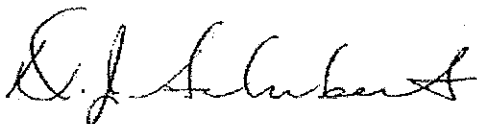
In regard to the duration of the DEIS, NMFS must explicitly state how long this particular DEIS will be in force and/or when it will prepare a new or supplemental analysis. Based on the language in the DEIS it would appear that, although NMFS considered making the EIS applicable to a ten-year time frame, it believes it more appropriate to limit the applicability of the EIS to the standard five-year duration of the IWC approved quotas. If this is the case and assuming the current NEPA process is not successfully challenged in court, NMFS would be well advised to complete any new or supplementary NEPA analysis before the IWC meeting in 2012 when it will presumably seek IWC approval for another 5-year bowhead whale quota.

Conclusion:

For the foregoing reasons, AWI believes that the DEIS is woefully inadequate and fails to satisfy the legal standards imposed by NEPA. In response, NMFS must decide whether to forge ahead and risk legal action challenging the adequacy of its Final EIS and RoD or it can issue a new EIS or a supplement to this DEIS in order to correct the inadequacies in this document.

Though AWI continues to believe that NMFS erred in failing to agree to an extension of the comment deadline, it appreciates the opportunity to submit these preliminary comments.

Sincerely,



D.J. Schubert
Wildlife Biologist

Attachments (submitted by electronic and regular mail)



Alaska Eskimo Whaling Commission

P.O. Box 570 · Barrow, Alaska 99723 · Phone: (907) 852 2392

October 12, 2007

VIA E-MAIL bowhead-DEIS@noaa.gov

Douglas P. DeMaster
Attn: Ellen Sebastian
National Marine Fisheries Service
709 W. 9th Street
P.O. 21688
Juneau, AK 99802-1668

RE: Comments on the Draft Environmental Impact Statement for Issuing Annual Quotas to the Alaska Eskimo Whaling Commission for a Subsistence Hunt of Bowhead Whales for the Years 2008 through 2012.

Dear Dr. DeMaster:

The Alaska Eskimo Whaling Commission appreciates the opportunity to submit the enclosed comments on the bowhead quota Draft EIS.

If you have any questions or would like to discuss these matters, please call me at my office: 907-852-0350.

Sincerely,


/s/ Harry Brower
Chairman

cc: Edward Itta, Mayor North Slope Borough
AEWC Commissioners

**COMMENTS OF THE ALASKA ESKIMO WHALING COMMISSION ON THE
NATIONAL MARINE FISHERIES SERVICE'S DRAFT ENVIRONMENTAL IMPACT
STATEMENT FOR ISSUING ANNUAL BOWHEAD WHALE QUOTAS
TO THE ALASKA ESKIMO WHALING COMMISSION
FOR THE YEARS 2008 THROUGH 2012.**

October 12, 2007

The National Marine Fisheries Service ("NMFS") has done a comprehensive and accurate job of analyzing its proposed issuance of a bowhead whale quota to the Alaska Eskimo Whaling Commission and the Association of Marine Mammal Hunters of Chukotka. The agency has evaluated a reasonable range of alternatives and has selected a preferred alternative that effectively will allow an Alaskan Eskimo bowhead whale subsistence hunt sufficient to satisfy the present nutritional and cultural needs of our Arctic communities. We are pleased that NMFS plans to issue the quota at the level authorized this past spring by the International Whaling Commission.

Our concerns about this EIS are relatively few. First, we disagree with NMFS' decision to rely on Minerals Management Service ("MMS") environmental studies, including studies that fail to account for the adverse impacts of offshore oil and gas development on our subsistence hunt. We are particularly concerned about NMFS's decision to cite MMS 2003, an EIS prepared for Lease Sales 186, 195, and 202. Among its flaws, that EIS crystallized a set of significance thresholds relative to our subsistence communities that are unrealistic and potentially very harmful to the health and well-being of our subsistence communities.

Second, we believe it would be appropriate and helpful if NMFS included a section in the Bowhead Quota EIS detailing, as much as possible in the time between the close of the comment period on the draft and the issuance of the final EIS, the effects of oil and gas operations on our subsistence hunt. Such a review and analysis would help support and explain the need for the carryover strikes, since the introduction of seismic and other industrial noise in the OCS affects whale behavior and makes hunting more dangerous and success less certain. Indeed, as the industrialization of the Arctic Ocean accelerates, we can expect to need the allowed carryover strikes as a consequence of skittish, spooked whales that we find farther and farther from shore.

Finally, we note that NMFS has included a few summary sentences under the document's headings "Seismic Surveys," "Site Clearance Survey Activities," and "Drilling," that indicate the serious intrusion of OCS operations into our hunting waters, but it would be fitting for NMFS to accumulate and report the information in a single section. DEIS pp. 29-30.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

OCT 12 2007

Reply To
Attn Of: ETPA-088

Ref: 07-032-NOA

Douglas P. DeMaster
National Marine Fisheries Service
709 W. 9th Street
P.O. Box 21688
Juneau, AK 99802-1668

Dear Mr. DeMaster:

The U.S. Environmental Protection Agency has reviewed the draft Environmental Impact Statement (EIS) for **Issuing Annual Quotas to the Alaska Eskimo Whaling Commission for a Subsistence Hunt on Bowhead Whales for the Years 2008 through 2012** (CEQ No. 20070315) in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures we evaluate the document's adequacy in meeting NEPA requirements.

The EIS proposes to issue annual quotas to the Alaska Eskimo Whaling Commission (AEWC) to allow continuation of its subsistence hunt for bowhead whales from the Western Arctic stock. The proposed action would allow the National Marine Fisheries Service (NMFS) to fulfill its Federal trust responsibilities to Alaskan Natives, and to ensure that any aboriginal subsistence hunt of whales does not adversely affect the conservation of the Western bowhead whale stocks.

The EIS contains three action alternatives that meet the International Whaling Commission's (IWC) two components of no more than 255 whales to be landed during the period of 2008 through 2012 and no more than 67 whale strikes per year with a provision to carryover unused strikes from the previous year. The preliminary preferred alternative would allow for the landing of no more than 255 whales for the 5 year period and 15 unused strikes from the previous year to be added to the annual strike quota.

The EIS does a good job documenting the Alaskan Eskimo tradition of subsistence bowhead whale hunting. In particular, the EIS describes in detail the history and cultural aspects of the whale hunt including how the hunt is an integral part of the social framework of the villages involved. The EIS discusses the widespread sharing of financial resources and equipment to support the hunters, and the sharing of labor in harvesting, processing and distributing subsistence foods. While the EIS discusses the use of non-food portions of the whales for handicrafts such as

baleen baskets, scrimshaw and carvings, it does not discuss the exchange of the non-food portions between villages. The exchange and purchase of non-food portions of the bowhead whale can be an important commodity for Native Alaskan villages involved. This activity should be discussed in the final EIS.

We have assigned a rating of LO (Lack of Objections) to the draft EIS. This rating and a summary of our comments will be published in the Federal Register. A copy of the rating system used in conducting our review is enclosed for your reference.

Thank you for the opportunity to review this draft EIS. If you would like to discuss these issues, please contact Mike Letourneau at (206) 553-6382 or feel free to contact me at (206) 553-1601.

Sincerely,



Christine B. Reichgott, Manager
NEPA Review Unit

Enclosure

cc: M. Combes, EPA-AOO