NOTICE OF DECISION
and
FINDING OF NO SIGNIFICANT IMPACT

Management Alternatives for Unimak Island Caribou Herd Environmental Assessment

SUMMARY

In consideration of public comments received, concurrent with a thorough evaluation of pertinent Refuge laws, regulations, and policies, I have decided the No Action Alternative is warranted at this time. The U.S. Fish and Wildlife Service (Service) has carefully reexamined what action would best achieve our three applicable Refuge purposes or provide the optimal balance among them. There also remain a number of areas where additional research and monitoring would provide a better understanding of the Unimak Island Caribou Herd (UCH) and its predators. This Notice of Decision and Finding of No Significant Impact (FONSI) documents my determination and conclusion that the No Action Alternative will not have a significant impact on the quality of the human environment.

PROPOSED ACTION PURPOSE AND NEED

In April 2010, the Service received a proposal from the Alaska Department of Fish and Game (ADF&G) to address declining caribou numbers on Unimak Island in southwestern Alaska. Unimak Island, encompassing 1,572 square miles, is part of the Alaska Maritime National Wildlife Refuge (NWR), but managed by Izembek NWR, headquartered in Cold Bay, Alaska. Approximately 93 percent of the island is Congressionally-designated wilderness. It is the only island among the Aleutians with naturally occurring populations of caribou (*Rangifer tarandus*), brown bear (*Ursus arctos*), and wolf (*Canis lupus*). The latter is possible because Unimak Island is the closest to the mainland, or the Alaska Peninsula, and is separated by Isanotski Strait, less than ½ mile (0.8 kilometers) wide.

The stated purpose and need of the ADF&G's proposal was to stop the decline, and the possible loss, of the caribou herd on Unimak Island to provide for continued subsistence hunting opportunities by Federally-qualified subsistence users and to ensure that the UCH continues to be a viable component of the Unimak Island ecosystem.

Since 2009, all hunting for caribou on Unimak Island, including subsistence hunting, was suspended for conservation reasons. Caribou herds throughout Alaska commonly undergo major population fluctuations over time, with island populations susceptible to a wider range of high and low cycles. In addition, since 2005, there has been little calf recruitment into the UCH, and it now has an unusually low number of bull caribou in proportion to cows. From 2002 through 2009, the UCH declined from a population of approximately 1,261 to the present low of 400. Multiple factors, such as nutrition and habitat condition, disease, climate change, predation, and hunting, may have

contributed to the recent UCH decline. To prevent the loss of the UCH, or a prolonged period with low numbers, ADF&G proposed to reduce wolf predation for a period of time with the objective to allow the herd to stop declining and begin to recover to a sustainable level that would support harvest by subsistence users.

In March 2010, the Alaska Board of Game established the "Unimak Wolf Management Area." This action established population objectives for caribou and wolves on Unimak Island and authorized the ADF&G to conduct wolf control operations to achieve those objectives. Because the proposed activity would involve lands which are part of the National Wildlife Refuge System (NWRS), a permit from the Service would be required before such activities could proceed. To consider issuance of a permit for this activity, the Service is required to comply with the National Environmental Policy Act (NEPA).

ADF&G was a cooperating agency with the Service in the preparation of the *Management Alternatives for Unimak Island Caribou Herd Environmental Assessment* (EA) under NEPA because of the broad authorities both agencies have for managing fish, wildlife, and habitat resources in Alaska. The EA was released for a 45-day public review on December 17, 2010. The full text of the EA can be found online at: http://alaska.fws.gov/nwr/planning/nepa.htm.

ALTERNATIVES CONSIDERED

The EA considered a No Action Alternative (Alternative A) and three predator control alternatives (Alternatives B, C, and D). The ADF&G Proposed Action (Alternative B) was to use helicopters as shooting platforms. Alternative C proposed using fixed-wing aircraft for shooting and providing helicopter logistic support for ground-based teams. Alternative D proposed using aircraft for logistic support of ground-based shooters. In addition to the three action and the No Action alternatives the EA describes five other alternatives which were considered but not analyzed in depth along with rationale for their rejection. All alternatives, including the No Action Alternative, included ongoing monitoring and research activities in support of adaptive management as a component of predator management.

Included with all alternatives, except the No Action Alternative, was the option of translocating caribou bulls to Unimak Island from the Southern Alaska Peninsula to increase the bull-to-cow ratio and pregnancy rates among UCH cows. This action was approved earlier by the Service through a Categorical Exclusion under NEPA. The Service-issued permit for translocation remains in effect and the Service encourages collaboration and cooperation with ADF&G to successfully complete these activities.

Translocation of caribou bulls from the mainland to Unimak Island raised some concerns about genetic differences about the herd units. The southern Alaska Peninsula is the source for the UCH and are closely related (K. Zittlau, 2004, Population genetic analyses of North American caribou. Ph.D. dissertation, University of Alberta,

Edmonton: Department of Biological Sciences). The introduction effect would be negligible, or at least comparable with documented natural migration patterns, as the mainland and island herds represent a "metapopulation," with mixing between the mainland and island herds at high densities and increasing isolation at lower densities.

The Service also previously approved a permit through a Categorical Exclusion under NEPA for ADF&G to radio-collar caribou calves and cows for monitoring purposes on Unimak Island.

Appendix D of the EA contained the draft Minimum Requirements Analysis (MRA) for evaluating administrative uses in wilderness. The draft MRA concluded that wolf control was warranted to maintain the wilderness character of the island. In addition, it stated that wolf control as an administrative action, even within a designated wilderness area, was viewed as benefitting wildlife populations and habitats in their natural diversity through stabilizing and improving the UCH. According to the MRA, the presence of caribou, together with the large predators, contributes to Unimak Island's unique wilderness character among the Aleutian Islands. Additionally, the MRA stated that maintaining the caribou herd would have provided continued opportunities for subsistence, once the UCH reached levels that would sustain hunting. If one of the EA action alternatives had been selected, the Service would have completed the MRA to identify ways to minimize impacts to wilderness character. The MRA and how some of the Service policy considerations have changed are discussed further below.

PUBLIC PARTICIPATION

When the Service released the EA for public comment, a preferred alternative was not identified. By the time the public comment period ended on January 31, 2011, the Service received over 95,000 responses to the EA, identifying numerous issues. While the vast majority of these comments were form letters opposing predator control without offering further input, there were many substantive comments. About half of all substantive comments received stated the EA was inadequate, insufficient, or failed to make a compelling argument for action and provided information to support these opinions. The remaining substantive public comments were divided among remarks regarding the scientific foundations of the proposed action and interpretations of Federal laws, regulations, and policies. There was considerable overlap in the expression of issues and many do not fit well into a single category. Briefly summarized, the comments fell into four broad themes:

1. Adequacy of NEPA compliance. Many of the comments received stated that the EA was deficient, inadequate, or failed to make a compelling case for action. Additionally, comments stated the scope of the proposed action, or the precedence that the proposed action would establish, warranted an Environmental Impact Statement (EIS), rather than an EA.

2. Scientific merit. Many public comments expressed the view that there was a lack of data quality or quantification, gaps in data, omissions of data, incorrect underlying assumptions, or data not sufficient to support the proposed action. Among many specific issues raised in these comments were: failure to evaluate bears as a caribou calf predator; claims that the evaluation of habitat, weather, disease, global climate change, or volcanic activity as mortality factors was superficial; claims there was minimal consideration of documented herd movements from island to mainland; claims there was minimal consideration of historic caribou herd fluctuations, including potential extirpation events; claims that the EA failed to consider the National Research Council (1997; *Wolves, Bears and Their Prey in Alaska*, National Academy Press, Washington, D.C.) recommendations and guidelines for predator control programs; claims of failure to establish whether caribou or predator numbers are unnatural; claims that the historic and projected subsistence use was not consistent with a need for action; failure to include 2008 harvest data; claimed lack of detailed historic subsistence use documentation; claimed lack of estimates for unreported harvest and effect on caribou herd dynamics; and, claimed lack of evaluation of impacts of trophy bull hunting on caribou herd structure at low densities or of spring bear hunts on calving behavior.

3. Interpretation of Federal laws, regulations, and policies, with emphasis on the Alaska National Interest Lands Conservation Act (ANILCA), National Wildlife Refuge System Improvement Act (Improvement Act), and Wilderness Act. Public comments argued generally for different interpretations of Federal mandates and regulations. Included in the public comments were arguments that there was a lack of evidence that predator control is necessary to maintain wilderness character; that the MRA did not show that killing wolves is the minimum requirement for managing the area as wilderness; that translocation of bull caribou may be the minimum requirement; failure to include an ANILCA Section 810 subsistence analysis regarding proposed action impacts on subsistence hunting; that conservation of natural diversity, as required under ANILCA, includes population fluctuations and possible extinction events in wilderness; that removal of wolves is not compatible with Refuge purposes; that the proposed action violates tenets of the Airborne Hunting Act; and, that culling of wolves for the purpose of increasing hunting opportunities is not permitted under ANILCA, the Improvement Act, or the Wilderness Act.

4. Subsistence community comments. During an EA stakeholder meeting in Cold Bay, residents of False Pass, King Cove, and Cold Bay provided comments regarding the historic and current subsistence hunting on Unimak Island. One comment was received from a False Pass resident during the public comment period encouraging adoption of the No Action Alternative. There were no comments from other subsistence users residing in Nelson Lagoon or Sand Point.

DECISION AND FINDING OF NO SIGNIFICANT IMPACT

The Service's decision must take into account all the mandates that apply to this case. ANILCA establishes the following relevant Refuge purposes: (1) *to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to marine mammals, marine birds and other migratory birds, the marine resources upon which they rely, bears, caribou and other mammals*; ... and, (3) *to provide, in a manner consistent with the purposes set forth in (1), the opportunity for continued subsistence uses by local residents.*

In addition, the Improvement Act requires: *Each refuge shall be managed to fulfill the mission of the System as well as the specific purposes for which that refuge was established*, and also requires that *the Secretary shall ensure that the biological integrity, diversity, and environmental health of the System are maintained for the benefit of present and future generations of Americans.*

Equally important, the Wilderness Act defines a wilderness as an *area where the earth and its community of life are untrammeled by man*. Wilderness is defined as *an area of undeveloped Federal land retaining its primeval character and influence. . .which is protected and managed so as to preserve its natural conditions and which. . ..generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.*

Refuge purposes, in this case natural diversity, wilderness character, and subsistence opportunities, all carry equal importance. No one purpose automatically surpasses another as a matter of law and policy. Where conflict exists among these purposes the Service must look at the positive and negative benefits and impacts and do the best balancing possible. Subsistence uses must be consistent with sound management principles and the conservation of healthy populations of fish and wildlife. This balancing has to be done on a case-by-case basis and the facts in other cases could lead to different conclusions.

After careful consideration of ADF&G's proposal, the analysis contained within the EA, the public comments, and reexamination of pertinent laws, regulations, and policies, I have selected the No Action Alternative as the alternative that achieves the best balance among the following Refuge purposes: conservation of fish and wildlife populations and habitats in their natural diversity, providing continued opportunities for subsistence, and preserving wilderness character.

The influx of public comments provided an alternative perspective to the Service's original point of view and an opportunity for a reevaluation of our interpretation of laws, regulations, and policies. While the EA and draft MRA initially led the Service to favorably view an action alternative, upon reconsideration it is evident that the negative impacts of wolf control on conservation of fish and wildlife populations and habitats in

their natural diversity and maintaining wilderness character outweigh the potential benefits of possible future subsistence opportunities at this time.

The Service takes its responsibility to subsistence users very seriously. The Service analyzed past subsistence use patterns, the current caribou hunting closure, and the scientific questions relative to whether the actions proposed would have resulted in an increased UCH. Historic subsistence use indicated caribou to be a major component of subsistence harvest for residents from Cold Bay, False Pass, King Cove, Nelson Lagoon, and Sand Point (Fall et al., 1990, Subsistence use of the Southern Alaska Peninsula caribou herd, ADF&G Technical Paper No. 191; Fall et al., 1996, The harvest and use of plant, wildlife, and fish resources in False Pass, Unimak Island, Alaska, ADF&G Technical Paper No. 183). Caribou is an important food source for over 90 percent of False Pass households. However, most of the subsistence hunting for caribou occurs on the Alaska Peninsula.

Further, there is no assurances that the proposed actions would have resulted in a caribou herd capable of supporting subsistence harvest due to uncertainty in locating and collaring caribou calves to identify mortality and target wolves since the UCH has become much more widely dispersed on the island recently. Many public comments received raised questions about whether the UCH would have responded to predator control as desired.

The *conservation of fish and wildlife populations and habitats in their natural diversity*, as stated in ANILCA, infers consideration and inclusion of population characteristics and dynamics, which are: rate of birth, rate of death, immigration and emigration, rate of population growth (or decline), social structure and behavior, temporal and spatial use of habitat, etc. Wilderness, as defined in the Wilderness Act, is *recognized as an area where earth and its community of life are untrammeled* by humans, or shaped by natural processes and not by human manipulation.

If some of the Unimak Island wolves are removed, population characteristics and complex social structure may be altered for this species as well as caribou and others in the wolf food chain. Further, removal of wolves through any of the action alternatives would have a negative impact on the Service's ability to fulfill Refuge purposes, notably conservation of natural diversity and maintaining wilderness character. Additionally, the increased aircraft traffic and human presence on Unimak Island would have been an intrusion on the wilderness character of the area. These negative consequences are found to outweigh positive benefits gained by providing potential opportunity for future subsistence uses by local residents in this case.

In selecting the No Action Alternative, I have decided that the No Action Alternative best satisfies both the natural diversity and wilderness purposes of the Refuge. I have concluded that the No Action Alternative best satisfies both the natural diversity and wilderness purposes of the Refuge. The three predator control alternatives showed

some potential to improve future subsistence opportunity, but with a highly negative impact on the natural diversity and the wilderness character of Unimak Island. These policy considerations, combined with our lack of understanding of the factors affecting the UCH and its predators, do not support an informed, science-based decision to undertake such direct action to enhance the UCH.

This decision may be no less controversial than the actual undertaking of predator control on Unimak Island. The selection of the No Action Alternative allows the translocation of bull caribou to the island. The Service issued a permit to ADF&G for such work in May 2010 that remains valid through 2012. I am committed to the monitoring of caribou and predators on Unimak Island and implementing specific studies in cooperation with ADF&G.

In addition, by selecting the No Action Alternative, the Service does not reject the use of predator control as a valid wildlife management tool in support of subsistence when appropriate.

The decision to adopt the No Action Alternative does not constitute a major Federal action that will significantly affect the quality of the human environment as defined in Section 102 (2) C of NEPA, and is therefore, a finding of no significant impact. The No Action decision does not require the preparation of an EIS under NEPA.

Geoffrey L. Haskett
Regional Director

3/7/11
Date