

COMPATIBILITY DETERMINATION

Use: Recreational (General) Fishing

Refuge Name: Arctic National Wildlife Refuge

Establishment and Acquisition Authority: The Arctic National Wildlife Refuge (Refuge, Arctic Refuge) was established by the Alaska National Interest Lands Conservation Act (ANILCA) (Public Law 96-487 Stat. 2371) on December 2, 1980. The Refuge boundary encompassed 19.64 million acres of land, including the 8.83-million acre Arctic National Wildlife Range (Range), which was established on December 6, 1960, by Public Land Order 2214. ANILCA re-designated the Range as part of Arctic Refuge, designated 7.16 million acres of the Refuge as Wilderness, and designated three wild rivers. In 1988, Public Law 100-395 added 325,000 acres of lands managed by the Bureau of Land Management (BLM) to the Refuge. An additional 1.3 million acres of land, originally selected by the State of Alaska under the Alaska Statehood Act (Public Law 85-508) but later relinquished, was added to the Refuge in two actions occurring in 1983 and 1985. Both these additions were of lands already within the boundaries of the Refuge.

Refuge Purposes: ANILCA established four purposes for the Refuge (including lands and waters in the original Range):

- i. *to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to, the Porcupine caribou herd (including participation in coordinated ecological studies and management of this herd and the Western Arctic caribou herd), polar bears, grizzly bears, muskox, Dall's sheep, wolves, wolverines, snow geese, peregrine falcons and other migratory birds and Arctic char and grayling;*
- ii. *to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;*
- iii. *to provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents; and*
- iv. *to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the Refuge.*

Public Land Order 2214 established the original Arctic National Wildlife Range "for the purpose of preserving unique wildlife, wilderness and recreational values...." These pre-ANILCA purposes apply only to those lands and waters in the original Range, and they remain in force and effect only to the extent they are not inconsistent with ANILCA or the Alaska Native Claims Settlement Act (ANILCA Section 305; 603 FW 2.8).

The Wilderness Act of 1964 (Public Law 88-577) creates the following additional purposes for the designated Wilderness area in the Refuge's boundaries; these purposes are within and supplemental to the Refuge's ANILCA and Range purposes: secure an enduring resource of Wilderness; protect and preserve the Wilderness character of areas in the National Wilderness Preservation System (NWPS); administer the NWPS for the use and enjoyment of the American people in a way that will leave these areas unimpaired for future use and enjoyment as Wilderness; and gather and disseminate information regarding the use and enjoyment of Wilderness areas.

National Wildlife Refuge System Mission: The mission of the National Wildlife Refuge System (Refuge System) is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd-668ee]).

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Description of Use(s): This is a re-evaluation of the compatibility of non-commercially-supported general fishing as a use of Federal lands in Arctic Refuge. This activity was originally found to be compatible in 1988 during the development of the original Arctic Refuge Comprehensive Conservation Plan and again determined to be compatible in 1994.

Means of access for fishing include fixed-wing airplanes, motorboats, non-motorized boats, hiking, and snowmobiling. General fishing is associated with other activities, such as camping, river rafting, hunting, etc. Fishing occurs spring through winter and is managed under State of Alaska fishing regulations (5AAC). The major rivers on the Refuge have good recreational fishing opportunities, based on reasonable accessibility by float plane or boat, and, based on current low levels of harvest have sustainable populations of anadromous and/or resident fish. There are also recreational fish resources in the Refuge's coastal system. Although all these drainages provide opportunities for day-use and overnight primitive camping, distance and cost of traveling to these areas for day-use fishing is prohibitive for most visitors.

Fishing patterns are estimated primarily through direct observation by Refuge staff and reports from commercial aircraft operators and from local residents. Use is concentrated in the summer months on rivers when flows are amenable to river travel. This activity is often secondary or is peripheral to other activities, which have been evaluated in separate compatibility determinations.

Availability of Resources: Adequate Refuge personnel and base operational funds are available to manage general fishing at existing levels. Administrative staff time primarily involves phone conversations and written correspondence, and could involve engagement in regulatory review.

Field work associated with administering the program primarily involves conducting law enforcement patrols to ensure recreational users' compliance with State fishing regulations and Refuge regulations and to work with adjacent land owners to monitor public use. It is estimated that less than two weeks of staff time is required to manage this use.

Anticipated Impacts of Uses: The Federal Subsistence Board and State Board of Fisheries regularly adopt regulations in response to fish population levels and to address issues of fishery allocation. Providing an opportunity for continued subsistence uses of fishery resources by local residents receives the highest priority from the Federal Subsistence Board. Recent, 1998 to present, Chinook salmon returns have been characterized as poor, and managers (State and Federal) may restrict recreational use of this resource. Chum salmon experienced a worrisome decline in the late 1990s; however, recent run strengths indicate that a general fishery on chum salmon currently is sustainable.

At current levels, general fishing harvests require little to no monitoring, and there are no anticipated deleterious effects on fish habitat. Should intensity of use increase, Refuge staff would increase monitoring efforts. If necessary, Refuge staff would review regulations and propose changes to protect fishery resources and subsistence fishing opportunities for people living near the Refuge. We will continue to work with the Fairbanks Fish and Wildlife Field Office to implement population inventories and conduct studies aimed at better understanding fish populations on the Refuge.

Visitors engaged in general fishing activities may encounter or contribute to the following emerging issues:

1. *Perceived Crowding and User Conflicts* - Simultaneous visits by hunting and recreation groups in some high-use areas due to weather, or high demand, have led to a reported erosion of visitor experiences and user conflicts.
2. *Physical impacts* - Human waste accumulation and localized vegetation damage has been reported, either from camping or aircraft landing on non-durable surfaces.
3. *Dalton Highway-based Visitation* - There is high probability that the western boundary of the Refuge will continue to become more popular with visitors as awareness of relatively economical Dalton Highway-based access continues to rise. Arctic Refuge managers now consider the Dalton Highway the Refuge's "front country."

During peak visitation, limited landing areas in some drainages may contribute to perceived crowding and user conflicts. Additionally, some localized vegetation damage caused by landing aircraft or camping on non-durable surfaces has been reported. These are emerging issues that need to be further monitored and evaluated. Future actions may be needed to address these concerns.

Impacts associated with this activity could be minimal and transitory to minor, and long-term. Disturbance to vegetation is site specific, minor, and long-term and would likely be restricted to campsites that receive repetitive use and to aircraft landings on non-durable surfaces.

Landing aircraft on non-durable surfaces can cause minor to moderate site-specific and long-term effects to Refuge habitats and vegetation. In several areas, soil compaction, scarring, and occasionally rutting have been documented. This is not a problem where aircraft land on durable surfaces such as gravel and sand bars, water, ice and snow, and certain other durable or resistant surfaces. These effects can be minimized or prevented by limitations, including temporal limits, on where aircraft can land, or under what conditions, including aircraft weight or tire configuration. Although not known to occur on the Refuge, landing aircraft could introduce invasive species that could impact resources in the Refuge. We will continue to monitor for such occurrences. Low over-flights, and sometimes landings and take-offs, can disturb or displace wildlife and bother visitors, although the effects are brief and usually minor.

Access to the Refuge during summer months would be by landing aircraft primarily on gravel bars. Winter access would be by "ski-equipped" aircraft. Landings on vegetated lowland tundra and disturbance to vegetation outside established landing areas could be limited under the stipulations of the special use permit. Although non-commercial aircraft are not required to acquire a special use permit, when possible through outreach, we encourage those operators to land on durable surfaces such as gravel bars and to avoid vegetated tundra or soft surfaces. The accidental introduction of invasive aquatic species from fishing tackle or waders could affect Refuge resources, although it is not known to have in the Refuge to date. Aquatic invasive species can cause long term damage to aquatic ecosystems. Staff will continue to monitor areas for such occurrences.

Public Review and Comment:

Public comments on compatibility determinations were solicited concurrently with the draft of the Refuge's Revised Comprehensive Conservation Plan (Plan) and Environmental Impact Statement. Public comments on compatibility determinations were accepted during the public review period for the draft Plan, which was announced in the Federal Register, on local radio stations, and in local newspapers. The 90-day public comment period began on August 15, 2011, and ended on November 15, 2011. We mailed the full draft Plan, and a summary of the Plan, to the individuals and organizations on our mailing list and posted both on the Refuge's web site. Six public hearings were held in Anchorage, Arctic Village, Fairbanks, Fort Yukon, Kaktovik, and Venetie, during which the Service received comments on the draft Plan. We received one specific comment from an individual on this compatibility determination.

The commenter suggested that we combine all consumptive recreation into a single compatibility determination called "Fish and Wildlife Harvest Programs" that would focus on the biological effects of wildlife management activities that are implemented through State regulations. The Service agrees that this is one way that compatibility determinations could be organized, and our policy allows for consideration of uses either independently or as a group of related issues. We feel that analyzing the commercial consumptive recreational uses individually and separate from the non-commercial consumptive uses serves us better for several reasons; the uses are not dependent upon one another, and we can better analyze the use, its potential to impact Refuge purposes, and propose stipulations that apply specifically to commercial users in the permit process when the use is considered individually.

We received two general comments on fishing, both of which wanted to ensure that the Refuge maintain quality fishing and not allow popular fishing sites to become over fished. They also did not want associated camping area along rivers to become overused and degraded. No

changes were made to the compatibility determination as a result of public comments except that we updated information on the related (supporting use) issue of aircraft impacts, as in other compatibility determinations.

Refuge Determination (check one below):

Use is not compatible

Use is compatible

Stipulations Necessary to Ensure Compatibility: Special use permits are not required for general fishing activities, so there are no associated stipulations. However, visitors will be required to comply with existing State and Federal regulations. The Refuge provides information on Leave No Trace principles, or other minimal impact techniques, and other means to minimize impacts to Refuge resources.

Justification: The National Wildlife Refuge System Administration Act of 1966, as amended by the Refuge Improvement Act of 1997, identifies compatible general fishing as one of six priority public uses of national wildlife refuges. The law states that, when managed in accordance with principles of sound fish and wildlife management, administration of these uses has been, and is expected to continue to be, generally compatible and that priority public uses should receive enhanced consideration over other public uses in refuge planning and management. The law also states that the U.S. Fish and Wildlife Service (Service) should provide increased opportunities for parents and their children to safely engage in traditional outdoor activities such as fishing.

Means of access by airplanes, motorboats, snowmobiles and non-motorized means for traditional activities, as provided by ANILCA and as currently regulated by the Service, have not materially interfered with or detracted from Refuge purposes. Should motorized transportation in support of general fishing increase to levels where it interferes with Refuge purposes, staff would work with anglers, air operators, and/or Alaska Department of Fish and Game to address impacts and resolve compatibility concerns.

General fishing is an activity that Congress intended to preserve when the Refuge was designated by ANILCA. Recreational fishing in the Refuge provides the public with high quality recreational opportunities. The State Board of Fisheries and the Federal Subsistence Board, respectively, review regulations to manage public fishery resources and to provide the continued opportunity for subsistence fishing by local residents in response to changing fish population levels and harvest patterns. These regulations provide adequate protection for the fishery resources and continued subsistence opportunities in balance with other Refuge purposes. Emerging issues will be further monitored and, if needed, regulated to ensure Refuge resources and visitor experiences are protected. When conducted in accordance with Service regulations, I find that these uses will not materially interfere with or detract from the purposes for which the Refuge was created, including Wilderness Act purposes for the Refuge Wilderness area and fulfillment of the mission of the Refuge System.

Supporting Documents:

- U.S. Fish and Wildlife Service. 1988a. Arctic National Wildlife Refuge Final Comprehensive Conservation Plan, Environmental Impact Statement, Wilderness Review, and Wild River Plans. U.S. Fish and Wildlife Service. Anchorage, Alaska. 609 pp.
- U.S. Fish and Wildlife Service. 1988b. Record of Decision: Arctic National Wildlife Refuge Final Comprehensive Conservation Plan, Environmental Impact Statement, Wilderness Review, and Wild River Plans. U.S. Fish and Wildlife Service, November 10, 1988. Anchorage, Alaska, USA.
- U.S. Fish and Wildlife Service. 2011. Arctic National Wildlife Refuge Draft Revised Comprehensive Conservation Plan, Draft Environmental Impact Statement, Wilderness Review, and Wild and Scenic River Review. U.S. Fish and Wildlife Service, June 2011. Anchorage, Alaska, USA.

Refuge Determination:

Refuge Manager/

Project Leader Approval

Richard [Signature] 8-4-12
Date

Concurrence:

Regional Chief

National Wildlife

Refuge System

Mike Boylan (Acting) 8/15/12
Date

Mandatory 10-year Re-Evaluation Date: 2022

Mandatory 15-year Re-Evaluation Date (for priority public uses): 2027

NEPA Compliance for Refuge Use Decision:

- Categorical Exclusion without Environmental Action Memorandum
- Categorical Exclusion and Environmental Action Memorandum
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision