

COMPATIBILITY DETERMINATION

Use: Subsistence Harvest of House Logs

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): Small scale subsistence log cutting was originally found to be compatible in the Refuge's 1988 Comprehensive Conservation Plan and was again determined to be compatible in 1994. Associated uses include hunting, fishing, trapping, firewood gathering, berry picking, and gathering of other plant materials while harvesting trees for house building. These uses also include motorboat access and other means of surface transportation traditionally employed for such subsistence purposes, as allowed under ANILCA section 811.

According to 50 CFR, 36.15, "Notwithstanding any other provision of this part, the cutting of live standing timber by local rural residents for appropriate subsistence uses, such as firewood or house logs, may be permitted in Alaska National Wildlife Refuges as follows: For live standing timber greater than six inches diameter at breast height (4 ½ feet above ground level), the refuge manager may allow cutting in accordance with the specifications of a special use permit if such cutting is determined to be compatible with the purposes for which the refuge was established." In addition, 50 CFR 36.15 indicates that a special use permit is not needed to harvest fewer than 20 trees of live standing timber between three and six inches diameter at breast height (dbh). Harvest of over 20 trees between three and six inches dbh would need a special use permit and would be subject to the same stipulations as other timber harvest permits.

Residents of communities near the Refuge boundary have lifestyles and economies that depend on subsistence resources. Subsistence activities described here focus primarily on the cutting of timber for house logs and/or firewood greater than six inches dbh or requests for greater than 20 trees between three and six inches dbh. Cutting of timber has primarily been

used to build, replace, or repair subsistence or trapping cabins on the Refuge or in the nearby communities. For house logs and firewood timber harvests, requests have been between 40 and 100 trees. Permit stipulations require permittees to utilize as much of the harvested tree as possible. Each permit application is evaluated on its own merits prior to approval.

Availability of Resources: Adequate Refuge personnel and base operational funds are available to manage subsistence house log harvest activities at existing and projected levels. Management primarily includes surveys and monitoring specifically for the management of house logs and firewood collecting. Surveys will be conducted from the air and from motorboats and will be used to determine where adequate stands of large white spruce occur and how many trees can be removed while allowing sustainability of riparian spruce stands. It is anticipated that management of these permits will require one to two week of staff time annually.

Anticipated Impacts of Use(s): White spruce is the favored timber species for logging. It occurs throughout central Alaska on well-drained floodplain soils, uplands, and south facing slopes where seasonal thaw of soils is deep. Most white spruce stands in floodplains and on uplands consist of trees 40–50 feet tall and 8–16 inches in diameter. Harvest of white spruce would probably occur only in areas accessible to village communities. The nearest study aimed at examining sustainability of white spruce logging was about 390 miles southwest on Nowitna National Wildlife Refuge, where Lambrecht (2004) estimated a sustainable harvest of one house log per 2.5 acres per year in ideal riparian white spruce habitat on islands along the Yukon River. Any tree harvest on the Refuge will be based on sustainability recommendations adopted from Koyukuk and Nowitna Refuges and regulated by permit special conditions. If cutting requests increase substantially above current low levels, Refuge staff will need to re-evaluate the adopted harvest recommendations to ensure they are sustainable.

Impacts to habitat caused by supporting boats, snowmobiles, and foot travel are generally believed to be minimal. Much of the access by subsistence users is by boat (spring and summer) or snowmobile (winter) during adequate snow cover. Temporary displacement and/or disturbance to wildlife can occur, but impacts would likely be short-term and minimal. Impacts to the wilderness characteristics of the Refuge will be minimized through special conditions limiting the number of trees that can be taken within 50 feet of riverbanks. The introduction of invasive plant species, perhaps from seeds carried on boats, snowmobiles, or dog sleds, could affect Refuge resources, although it is not known to have occurred on the Refuge to date. Logging sites may be vulnerable to establishment of non-native weeds if bare soil is exposed. This is not likely during selective logging of a few trees per acre.

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 on this compatibility determination.

The Gwitch'in Steering Committee commented that the proposed stipulations for harvest of house logs are overly specific and too prescriptive for the environment (near Arctic Village) where stands (of trees) are variable. They also felt that the proposed system of permits and reports are entirely unnecessary and inappropriate and requested that we simply trust the people who are cutting wood to know what they are doing. Currently there is no limit on the amount of standing dead or down timber a subsistence user may collect for their household needs, and no permit is required for that harvest. The number and size of live trees allowed without a permit is specified, as is the permit process for exceeding that number. No fees are charged for subsistence use permits. These regulations have been in place for several decades, and we believe they are reasonable in providing for the subsistence use of timber resources. However, we will conduct a thorough review of these regulations to ensure they provide for a continued subsistence opportunity and for the conservation of habitats in their natural diversity consistent with sound management principles. Any proposed changes to these regulations will be done in full consultation with tribal governments, Native organizations, and local residents.

No changes were made to the compatibility determination as a result of public comments.

Refuge Determination (check one below):

Use is not compatible

Use is compatible

Stipulations Necessary to Ensure Compatibility:

A special use permit with the following stipulations is required for subsistence harvest of house logs or firewood greater than six inches dbh or exceeding 20 trees between three and six inches dbh. These stipulations are intended to minimize impacts and ensure compatibility. Refuge permits may also include other special conditions as necessary or appropriate for the specific operations or activities that are proposed. These stipulations will be updated periodically to reflect management needs or policy changes.

1. Failure to abide by any part of this special use permit; violation of any refuge related provision in Titles 43 (Part 36) or 50(sub-chapters B and C), Code of Federal Regulations; or violation of any pertinent state regulation (e.g., fish or game violation) will, with due process, be considered grounds for revocation of this permit and could result in denial of future permit requests for lands administered by the U.S. Fish and Wildlife Service. This provision applies to all persons working under the authority of this permit (e.g., research assistants). Appeals of decisions relative to permits are handled in accordance with Title 50 Code of Federal Regulations Part 36.41.
2. The permittee is responsible for ensuring that all employees, party members, aircraft pilots, and any other persons working for the permittee and conducting activities allowed by this permit are familiar with and adhere to the conditions of the permit.

3. A copy of this permit must be in the permittee's or field party chief's possession at all times while exercising the privileges of the permit.
4. This permit may be cancelled or revised at any time by the Refuge manager in case of emergency (e.g., high fire danger, flooding, unusual resource problems, etc.).
5. The permittee must notify the Refuge manager during Refuge working hours in person or by telephone before beginning and upon completion of annual activities allowed by this permit.
6. Prior to beginning any activities allowed by this permit, the permittee must provide the Refuge manager with: (1) the name(s) and method of contact for the lead field guide(s); (2) aircraft and other vehicle types to be used and identification information for these vehicles; (3) names of assistant guides and helpers; and (4) any changes in information provided in the original permit application.
7. The Refuge Manager or designee, upon request, shall be afforded the opportunity and logistical support from the nearest commercial transportation site to accompany the permittee for the purpose of inspection and monitoring permittee activities. A final inspection trip provided by the permittee of the areas of use may be required by the Refuge Manager to determine compliance with the terms of this permit.
8. This permit authorizes use only on Arctic Refuge lands. Use of land selected by or conveyed to the State of Alaska or North Slope Borough; or a Native corporation or an individual is not authorized by this permit.
9. The permittee and permittee's employees, coworkers, or contractors do not have the exclusive use of the site(s) or lands covered by this permit.
10. The permittee must take no action that interferes with subsistence activities of rural users or restricts the reasonable access of subsistence users to Refuge lands. This may include but is not limited to disturbance of wildlife and their movements near subsistence hunters, and damage to cabins, trails, traditional campsites, or caches used by subsistence users.
11. Any action by a permittee or the permittee's employees which unduly interferes with or harasses other Refuge visitors or impedes access to any site is strictly prohibited. Examples of prohibited acts include, but are not limited to, low flights over camps or persons at less than 500 feet (unless landing) and parking aircraft or placing other objects (rocks, tents, etc.) on any landable area so as to restrict use by other aircraft or persons.
12. In accordance with the Archaeological Resources Protection Act (16 U.S.C. 470 ee), no person may excavate, remove, damage or otherwise alter or deface, or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands unless permitted or exempted (see 16 U.S.C 470cc for permit or exception guidance). No person may sell, purchase, exchange, transport, receive, or offer to sell, purchase, or exchange any archaeological resource if such resource was excavated or removed from public lands.
13. The permittee shall provide the Refuge Manager with a report including the number of trees harvested, estimate of size (length and diameter) of logs, and which area(s) logs were harvested under this permit within 30 days of permit expiration.

14. Collection of logs is limited to permitted area.
15. The permit authorizes the harvest of logs only for permittee's personal use for construction of subsistence cabins, houses or for firewood. Harvest of logs for commercial use is prohibited.
16. The permittee is not authorized to clear cut or group harvest an area, and is required to follow selective cutting procedures when harvesting trees (e.g. after harvesting one tree the next tree harvested must be a minimum of 100 feet away from a previously cut tree). No cutting of timber may be done within 50 feet of a stream, lake, or river and no more than one tree in five (20%) may be cut in any specific stand.
17. The permittee is required to lop and scatter all slash (i.e. all branches must be cut off the bole, with the remaining bole cut every four feet). Cut limbs may not be concentrated on the site, all tree harvest debris must be scattered to avoid fuel accumulations and eliminate potential spruce bark beetle habitat.
18. The permittee is required to utilize as much of the harvested tree as possible.
19. The operation of aircraft resulting in herding, harassment, hazing, or driving of wildlife is prohibited. It is recommended that all aircraft, except for take-off and landing, and as necessary for safety, shall maintain a minimum altitude of 2000 feet above ground level (AGL).
20. Unauthorized caches of fuel or other supplies are prohibited. Fuel storage, if any, will be as outlined in the operations plan, preapproved by the manager, and in compliance with regional Service fuel storage policy.
21. The construction of landing areas or pads is prohibited. Incidental hand removal of rocks and other minor obstructions may be permitted.
22. Snowmobiles, dog teams, watercraft, and other means of transportation shall be operated in such a manner as to prevent the herding, harassment, hazing, or driving of wildlife for viewing or other purposes.
23. The use of off-road vehicles (except snowmobiles with adequate snow cover) is prohibited. The use of snowmobiles, dog teams, and other means of surface transportation may only be used when adequate snow cover is present and in such a manner as to prevent waste or damage to the Refuge. The phrase "adequate snow cover" means snow is of a depth to protect the underlying vegetation and soil.
24. Any human-wildlife interactions that have resulted in animals obtaining food; destroying property; or posing a threat to human safety; must be reported to the Refuge manager immediately at (907) 456-0250, as soon as communication becomes available. You are required to submit a written report within 30 days to the Refuge manager for all interactions with grizzly bears that have resulted in bears obtaining food; destroying property; posing a threat to human safety; or the death of a grizzly bear, so that this data can be used to help prevent future human-bear conflicts. You may use the Bear Incident Report form (Service 2008). Animals taken in defense of life or property must be reported to the Refuge manager immediately, and to the Alaska State Troopers at (907) 451-5350, and salvaged in accordance with State regulations.

25. Construction of cabins, platforms, or other permanent structures is prohibited. Wall tents with floors that are completely removed from the Refuge at the end of field season are allowed.
26. Permittees shall maintain their use areas in a neat and sanitary condition. All garbage, litter, and debris must be removed from the Refuge. Food, garbage, and other materials must be stored to minimize attraction to bears and other wildlife. All evidence of your camp must be obliterated prior to your departure from the site. Equipment and other property must be removed from the Refuge upon completion of the permitted activities.
27. Human waste must not be left less than 200 feet from springs, lakes, and streams. Bury waste under soil (or under snow at the ground level during periods when the ground is frozen). Paper toilet tissue, if used, must be packed out or burned completely to ash. Moist towelettes or sanitary products must be removed as trash.
28. The preeminent value of Arctic Refuge lies in its wilderness condition. The permit holder shall ensure that all employees and clients seek to minimize the effect of their activities on the wilderness characteristics of the land, wildlife, and the unique experience available here.

Justification: The definition of "subsistence uses" found in Section 803 of ANILCA includes the use of logs for the construction of shelter (i.e., homes), and U.S. Fish and Wildlife Service (Service) regulations at 50 CFR 36.15 allow this use on Alaska refuges. These regulations specify that a refuge permit is required to cut trees greater than six inches in diameter dbh or for harvest of more than 20 trees between three and six inches dbh. Residents of the nearby village communities have lifestyles and economies that depend on subsistence resources. Manufactured building materials are not available at a reasonable cost to these subsistence users. After fully considering the impacts of this activity, as described previously in the "Anticipated Impacts of the Use" section of this document, it is my determination that this subsistence activity in the Refuge does not materially interfere with or detract from the purposes of the Refuge or the mission of the Refuge System.

Supporting Documents:

- Lambrecht, R. 2004. Forest Inventory - Nowitna NWR Islands. Unpubl. report in files, U.S. Fish and Wildlife Service. Galena, Alaska. 4pp.
- 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] *3-4-12*
Date

Concurrence:

Regional Chief

National Wildlife

Refuge System

Mike Boylen (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