

Compatibility Determination

Title

Compatibility Determination for Forest Product Use (noncommercial), Kenai National Wildlife Refuge.

Refuge Use Category

Agriculture, Aquaculture and Silviculture

Refuge Use Type(s)

Forest Product Use (noncommercial)

Refuge

Kenai National Wildlife Refuge

Refuge Purposes and Establishing and Acquisition Authorities

Franklin D. Roosevelt established the Kenai National Moose Range (Moose Range) on December 16, 1941, for the purpose of “. . . protecting the natural breeding and feeding range of the giant Kenai moose on the Kenai Peninsula, Alaska, which in this area presents a unique wildlife feature and an unusual opportunity for the study, in its natural environment, of the practical management of a big-game species that has considerable local economic value...” (Executive Order 8979).

The Alaska National Interest Lands Conservation Act (ANILCA) substantially affected the Moose Range by modifying its boundaries and broadening its purposes to include conservation of a broad array of fish, wildlife, and habitats in their natural diversity, meeting international treaty obligations, protection of water quality and quantity, and providing opportunities for scientific research, land management training, and educational and recreational activities. ANILCA also redesignated the Moose Range as the Kenai National Wildlife Refuge (Refuge), added nearly a quarter of a million acres of land, and established the 1.32-million acre (534,349 hectare) Kenai Wilderness.

ANILCA sets out purposes for each national wildlife refuge in Alaska. The ANILCA purposes of the Refuge are described in Section 303(4)(B) of the Act. ANILCA purposes for the Refuge are as follows:

- (i) to conserve fish and wildlife populations and habitats in their natural diversity, including but not limited to moose, bears, mountain goats, Dall sheep, wolves and other furbearers, salmonoids and other fish, waterfowl and other

migratory and nonmigratory birds;

(ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;

(iii) 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;

(iv) to provide, in a manner consistent with subparagraphs (i) and (ii), opportunities for scientific research, interpretation, environmental education, and land management training; and

(v) to provide, in a manner compatible with these purposes, opportunities for fish and wildlife-oriented recreation.

Policy (603 FW 2) directs that pre-ANILCA purposes remain in force and effect, except to the extent that they may be inconsistent with ANILCA or the Alaska Native Claims Settlement Act, and that such purposes only apply to those areas of the Refuge in existence prior to ANILCA. The Executive Order purpose to protect Kenai moose, however, is treated as complementary to the broader ANILCA purpose of conserving fish and wildlife populations; therefore, no special attention is given the Executive Order purpose in this compatibility review process.

ANILCA designated approximately 1,350,000 acres of the Refuge as wilderness. Except as otherwise expressly provided for in ANILCA, designated wilderness is to be administered in accordance with applicable provisions of the Wilderness Act of 1964 (Public Law 88-577). Section 4.(3)(b) of the Wilderness Act provides, "Except as otherwise provided in this chapter, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise noted in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use."

National Wildlife Refuge System Mission

The mission of the National Wildlife 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 (Pub. L. 105-57, 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes.

This compatibility determination reviews and supersedes the 2007 compatibility determination for Forest Product Use.

What is the use?

We allow the personal, noncommercial use of forest products consistent with refuge-specific regulations (50 CFR 36.39 (i)(8)(vii)(B) and 50 CFR 36.39 (i)(9)(vi) & (vii)). The Refuge, in multiple decades of operation, has employed a variety of management procedures that have allowed for public use of forest products including: firewood cutting and gathering (dead and downed) for personal use at home, gathering of dead and downed wood for use in campfires while camping or staying in public use cabins on the Refuge, collection of poles for personal, noncommercial use, collection of root wads, willow cuttings and spruce trees for riverbank stabilization projects, and the seasonal cutting of Christmas trees for personal use.

This compatibility determination does not evaluate the subsistence use of timber and plant material by federally-designated rural residents as allowed under 50 CFR 36.15. The subsistence use of forest products will be included within a general subsistence compatibility determination. Also, any commercial harvest of timber resources would require appropriate National Environmental Policy Act compliance and its own compatibility determination.

Is the use a priority public use?

No.

Where would the use be conducted?

This compatibility determination covers noncommercial forest product use that could occur anywhere on the Refuge. Most noncommercial forest product use within the Refuge for home firewood use, for poles (usually fire-killed spruce poles), and as source materials for riverbank stabilization occurs within 300 feet of a public road. The harvest of Christmas trees is prohibited within 150 feet of roads, trails, campgrounds, picnic areas, and waterways (50 CFR 36.39(i)(9)(vii)), but also generally occurs proximal to public roads. Use of dead and down trees for campfires while camping occurs throughout the Refuge but is most concentrated in the vicinity of developed campgrounds.

The Refuge lies on the western Kenai Peninsula (Peninsula). This 10,039-square-

mile (26,000-square-kilometer) Peninsula is connected to mainland Alaska by a 10-mile (16-kilometer) wide isthmus and is flanked by Prince William Sound to the east, Cook Inlet to the north and west, and the Gulf of Alaska to the south.

Flora and fauna on the Refuge are unusually diverse for this latitude because of the juxtaposition of two biomes on the Peninsula: the northern fringe of the Sitka spruce-dominated coastal rainforest on the eastern side of the Kenai Mountains and the westernmost reach of boreal forest in North America on the western side of the Kenai Mountains. The forests on the Refuge are dominated by white and black spruce with an admixture of aspen and birch. Extensive peatlands are interspersed among spruce in the Kenai Lowlands on the northern part of the Refuge. Lichen-dominated tundra replaces hemlock and subalpine shrub above tree line in the Kenai Mountains and Caribou Hills.

The eastern one-third of the Refuge lies within the Kenai Mountains, which range in elevation from 3,000–6,600 feet (900–1,800 meters). The mountains are heavily glaciated, and many of the high valleys are buried beneath the vast Harding Icefield, which covers approximately 720 square miles (1,865 square kilometers) at elevations of 4,000–5,300 feet (1,200–1,600 meters). The remaining two-thirds of the Refuge lie in the Kenai Lowlands, which is part of the Cook Inlet–Susitna Lowlands. These lowlands consist of ground moraine and stagnant ice terrain with low ridges, hills, and muskeg.

The Kenai River flows through the Refuge and drains much of it. Other primary watersheds include those of the Swanson River, Chickaloon River, and Kasilof River. There are thousands of lakes on the Kenai Peninsula—nearly all of them are on the Refuge. The largest are two glacial lakes, Tustumena Lake (73,000 acres or 29,500 hectares) and Skilak Lake (25,000 acres or 10,110 hectares). More than 4,600 smaller lakes dot the Refuge, mostly in the Moose, Swanson, and Chickaloon river drainages.

The Refuge has documented 1,086 species of flora and fauna (151 birds, 20 fish, 30 mammals, 164 arthropods, 484 vascular plants, 97 fungi, 35 lichens, 14 liverworts, 90 mosses) and 1,139 other terrestrial and aquatic invertebrates. Eighteen formations have been classified on the Refuge under the National Vegetation Classification System.

The Refuge now hosts more than 1 million annual visitor use days, and an estimated 300,000 visitors spend extended periods of time on the Refuge enjoying a variety of outdoor activities, including fishing, camping, hunting, hiking, wildlife viewing and photography, skiing, canoeing and river floating. Refuge environmental education and interpretive programs provide education and outreach to over 12,000 students and/or visitors annually.

A more detailed description of the Refuge environment is found in the 2010 Revised

Comprehensive Conservation Plan (USFWS 2010).

When would the use be conducted?

The personal, noncommercial use of forest products as wood for campfires while camping on the Refuge could occur year-round. The harvest of Christmas trees is allowed from Thanksgiving until Christmas each year. The cutting and removal of firewood on the Refuge for personal use is allowed only when announced by the Refuge Manager and only through the use of a special use permit (FWS Form 3-1383-G), typically from October through March. Special use permits are also issued for pole gathering on a case-by-case basis, requests for this use are relatively infrequent. Gathering of live source material such as willow cuttings and root wads for bank stabilization is occasional and associated with specific projects, while live spruce are made available opportunistically and are usually associated with hazardous fuel reduction and firebreak construction projects.

How would the use be conducted?

Firewood and pole cutting and gathering by the public for personal, noncommercial use requires a special use permit issued by the Refuge Manager and compliance with the permit's special conditions (50 CFR 36.39 (i)(9)(vi)). These special conditions normally require the trees to be dead and down but this can be modified by the Refuge Manager to allow cutting of standing trees when necessary and where this use supports refuge objectives such as hazardous fuel reduction. Refuge staff and contracted personnel have also fallen trees for fuel reduction or hazard tree removal, which then are made available to the public for firewood. Small spruce trees used for bank stabilization are occasionally stockpiled and made available to the public through hazardous fuel reduction and firebreak construction projects. Christmas tree cutting does not require a permit and remains a popular tradition for many area residents.

Why is this use being reevaluated?

Noncommercial forest product use is an existing use that is being reevaluated subject to 603 FW 2.11 (H). A Refuge Manager may reevaluate the compatibility of existing uses at any time. Non-wildlife-dependent recreational uses should be reevaluated at least every 10 years. The compatibility of this use is being reviewed to comply with the minimum reevaluation requirement.

Noncommercial forest product use facilitates or enhances a variety of other public uses that may or may not require an overnight stay (e.g. hunting, camping, hiking, trapping, etc.). Currently, there is a widespread spruce bark beetle outbreak in the northern portion of the Kenai Peninsula and Refuge. A large volume of standing dead timber is now, or expected to be, in close proximity to Refuge facilities

including campgrounds, roads and structures. It is anticipated that most mature spruce trees in the northern half of the Refuge will succumb to this outbreak. Public interest in harvesting beetle-killed spruce for firewood on the Refuge remains high even though it is widely available throughout the region.

Availability of Resources

One-time costs

There are no one-time costs associated with noncommercial forest product use.

Annual/recurring expenses

Administrative costs associated with noncommercial forest product use are incurred for planning and signage of areas open for firewood gathering and for news release preparation for any opening involving any noncommercial forest product use (e.g. firewood and Christmas tree harvest).

Special use permits currently include a special condition limiting firewood cutting for personal, noncommercial use to dead and down trees (although this requirement may be rescinded by the Refuge Manager as necessary). Due to the extent of the infestation, and size of most beetle-killed trees, trained and qualified refuge staff or contractors routinely fell hazard trees. Staff prioritize locations near buildings, along roads, in campgrounds and other recreational facilities and fell these trees prior to making the wood available for firewood gathering. These costs are captured under staff time and are the highest costs associated with the noncommercial forest product use. Other staff time would include routine law enforcement patrols, fire prevention patrols and for monitoring and, if necessary, control of invasive plant species.

Off-setting Revenue

An administrative fee may be charged for special use permit issuance for firewood or pole gathering comparable to fees charged by private landowners or agencies in the vicinity (50 CFR 29.5). This fee has not been charged for the past few years as the availability of firewood has been in conjunction with fuels reduction projects or removal of beetle-killed spruce trees that were felled because they posed a danger to the public or refuge facilities. Benefits of removing downed hazard trees include a reduction of heavy ground fuels in the wildland-urban interface and proximal to facilities and structures. While this compatibility determination assumes this fee will continue to be waived (Table 2) and no off-setting revenue will be realized, this does not preclude the implementation of this fee by the Refuge Manager in future

years.

Table 1. Costs to Administer and Manage Noncommercial Forest Product Use

Category and Itemization	One-time Cost	Recurring Annual Expenses
Develop Plan/NEPA document/opening package	--	\$100
Construct facilities	--	--
Develop signage and brochures	--	\$100
Staff time (LE, administration and management)	--	\$25,000
Maintenance	--	--
Monitoring	--	\$7,500
Total one-time expenses	--	\$32,700
Total recurring annual expenses	--	--
Offsetting revenues	--	--
Total expenses	--	\$32,700

Anticipated Impacts of the Use

The effects and impacts of the use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the use. This compatibility determination includes a brief synopsis of the anticipated impacts. Generally, we will not consider resources that would not be affected or only negligibly affected by the use. Those resources that are not likely to be affected or negligibly affected include; water quality, threatened and endangered species, geology and soils, air quality, floodplains, cultural resources and socioeconomics.

Wildlife, Aquatic Resources and Habitats

Personal, noncommercial forest product use can result in localized disturbance of wildlife and can affect wildlife movements and/or distributions. The activities covered under this use group most frequently occur in and along developed areas of the Refuge. Most firewood cutting areas are within 300 feet of developed roads or other previously disturbed areas such as campgrounds. These areas normally contain wildlife species that are habituated to human presence or wildlife that is more transient and not spending any great amount of time in the area. Firewood gathering for home use is typically permitted during the October – March period when frozen ground conditions help minimize impacts to ground cover and soils. Other activities covered under noncommercial forest product use such as Christmas tree cutting or gathering of willow cuttings are dispersed in nature with negligible impacts on wildlife and habitats. Use of source materials for bank stabilization helps protect and restore riparian and near-shore aquatic habitats, primarily along areas of the Kenai River, benefitting many fish and wildlife species.

Wilderness

Most noncommercial forest product use occurs outside of the Kenai Wilderness. Firewood for campfires associated with backcountry camping is the most likely noncommercial forest product use occurring within Wilderness. Although it is likely rare, the harvest of Christmas trees is not prohibited in Wilderness and may very occasionally occur in road-accessible Wilderness units.

No areas within designated Wilderness are open to personal use firewood gathering or collecting of poles, except for the use of dead and down wood in campfires while camping or staying in public use cabins on the Refuge. The collection of root wads, willow cuttings, and spruce trees for riverbank stabilization projects also does not occur within Wilderness. Chainsaw noise associated with firewood cutting that occurs outside of but proximal to Wilderness, can carry long distances and may impact wilderness experiences for some visitors.

Visitor Use and Experience

Most noncommercial forest product use occurs during periods when visitor use is low or in areas where visitors are not likely to be present. Firewood gathering for home use is typically permitted during the October – March period which reduces potential for conflicts with other visitors. The harvest of Christmas trees occurs during the Thanksgiving – Christmas period when visitor use is also low. The harvesting of trees and materials for riverbank stabilization products are usually selected to avoid impacts to visitors. Should visitors be present, the noise from chainsaws and/or heavy equipment would likely detract from the experience sought by the visitors.

The ability of visitors to gather and use forest products for campfires while camping on the Refuge generally enhances visitor use and experience by providing a ready and free source of firewood.

Refuge Management Operations

Areas selected for the noncommercial forest product use, such as firewood or poles for home use, are usually associated with and support management objectives to mitigate hazard trees around refuge facilities (i.e. dead trees that may fall on refuge facilities or visitors) and/or reduce hazardous fuels in proximity to the wildland urban interface. Due to the current widespread presence of large mature spruce bark beetle-killed trees, the Refuge has contracted or used trained and qualified staff to fell trees prior to opening an area for firewood gathering to avoid safety issues with allowing the public to fell standing dead trees. The requirement to harvest only dead and down trees has been a special condition of special use permits for the past 10 years but this requirement may be rescinded by the Refuge Manager if it is determined that safeguards are in place to ensure protection of the public and facilities.

The requirement for obtaining a special use permit to collect firewood or poles creates an administrative workload for staff. Conditions of the permit are in place to protect soils and vegetation, and the permit requirement provides a mechanism for the Refuge to estimate the amount of fuel that is removed each year. In previous years, the Refuge required the reporting of the quantity of firewood or other timber resources removed. While this reporting is no longer required, we use the average amounts previously reported and apply that harvested amount to the current number of permits to estimate the total amount of fuels removed each year.

Subsistence

Subsistence use of timber and plant material by federally-designated rural residents is allowed under 50 CFR 36.15. It is not believed that the use of timber resources by the general public will materially interfere with subsistence users of this same resource given the small number of subsistence users who have utilized this resource in the past as well as the large expanse (1.9 million acres) of the Refuge.

Potential impacts of a use on the refuge's purposes and the Refuge System mission

Short-term impacts

Wildlife - Impacts to wildlife from the personal, noncommercial forest product use would be considered short-term impacts given the limited number of days of use

by the public at any one given location per year. Wildlife at most use areas would not likely change their movements or behavior with only minimal disturbance from the public utilizing these areas for the noncommercial forest product use.

Visitor use and experience – Provided noncommercial forest product use continues to be confined to periods of low use or areas with limited public use, impacts would be short-term and minor.

Subsistence – The use of timber resources by the general public is unlikely to negatively impact subsistence users of this same resource given the quantity of available material for firewood and pole gathering (the primary subsistence uses of forest resources) on the Refuge. Any impacts would likely involve a short-term displacement to an alternative area.

Long-term impacts

No negative impacts associated with the personal, noncommercial forest product use are considered to be long-term impacts.

Wildlife, Aquatic Resources and Habitats – Source material for bank stabilization projects used to restore and protect riparian habitats may provide a long-term benefit to Refuge resources.

Visitor use and experience – The ability of the public to utilize timber resources for campfires provides a long-term benefit which positively impacts visitor use and experience. The collection of dead and down woody materials for campfires is a traditional part of the camping experience enjoyed by many.

Wilderness – The use of timber resources within Wilderness is almost exclusively for the gathering of dead and down woody material for use in campfires. Allowing this practice supports providing primitive recreational opportunities in Wilderness.

Refuge Management Operations – Allowing firewood gathering and pole harvesting in certain locations contributes over the long term to Refuge objectives for mitigating hazard trees and reducing hazardous fuel loads.

Public Review and Comment

Legal notice of the draft compatibility determination was published in the Anchorage Daily News on May 24, 2023 which initiated a 30-day public comment period. A notice was placed on the Refuge's website <<https://www.fws.gov/refuge/kenai>> and on the refuge Facebook page. A press release was also sent to our standard mailing list on May 24, 2023.

Only one comment was received on this CD during the comment period and this comment was from the State of Alaska. They noted that the purposes of the Kenai NWR are identified in ANILCA and requested the removal of the statement, "some

of the reasons why Congress established the Refuge”. We deleted a sentence as a result of this comment.

Determination

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility

The following stipulations are to be included in the implementation of personal, noncommercial forest product use by the public.

- 1) Firewood and other forest products may only be cut or removed under the terms and conditions of a special use permit (50 CFR 36.39(i)(9)(vi)) except that no permit is needed for firewood gathering for campfires while camping or using a public use cabin on the Refuge (50 CFR 36.39(i)(8)(vii)) and for the cutting of Christmas trees when the Refuge is open for that activity (50 CFR 36.39(i)(9)(vii)).
- 2) Refuge Manager may impose special conditions to any special use permit which may restrict the timing, quantities or other conditions likely necessary for the use to remain compatible.
- 3) A single spruce tree may be cut per household per year no larger than 20 feet in height from Thanksgiving through Christmas Day. Trees may be taken anywhere on the refuge, except that we prohibit taking trees from within the 2-square-mile Refuge Headquarters area on Ski Hill Road. Trees must be harvested with hand tools, and must be at least 150 feet from roads, trails, campgrounds, picnic areas, and waterways (lakes, rivers, streams, or ponds). Stumps from harvested trees must be trimmed to less than 6 inches in height. (50 CFR 36.39(i)(9)(vii)).
- 4) Campers and occupants of public use cabins may cut only dead and down vegetation for campfire use (50 CFR 36.39(i)(8)(vii)(B)). A special use permit is not required for collection of wood for campfire use while camping on the Refuge.

Justification

Allowing use of dead and downed timber for firewood for use while camping and Christmas tree cutting on the Refuge enhances visitor use and experience for many Refuge visitors. Firewood gathering for home use contributes to Refuge objectives for mitigating threats to infrastructure and public safety from hazard trees and reducing hazardous fuels. Use of source materials such as willow cuttings and

spruce trees for bank stabilization helps protect and restore important habitats along the Kenai River.

Based on available information and best professional judgement, the Service has determined that the noncommercial forest product use, as outlined in this compatibility determination, in accordance with the stipulations provided above and with continued oversight and management by the Refuge, would not result in negative resource impacts to a degree which materially interfere with or detract from the fulfillment of Refuge purposes and the National Wildlife Refuge System mission. Similarly, noncommercial forest product use as outlined in this compatibility determination and with continued management by the Refuge to mitigate for potential and realized impacts to resources and natural processes, would not conflict with requirements of the National Wildlife Refuge System Administration Act, as amended, to maintain the biological integrity, diversity, and environmental health of the refuge.

Signature of Determination

Refuge Manager

Mandatory Reevaluation Date

December 2, 2033

Literature Cited/References

Executive Order 8979. 1941. 6 Federal Register 6471. Enacted Alaska (Kenai National Moose Range)

USFWS. 2010. Revised Comprehensive Conservation Plan and Environmental Impact Statement (2 volumes): Kenai National Wildlife Refuge. USFWS, Region 7, Division of Conservation Planning & Policy, Anchorage, AK.