

# Compatibility Determination

## Title

Compatibility Determination for Cabin Use (modern public use cabins, historic or existing cabins designated as public use cabins, and historic or existing cabins designated as administrative cabins), Kenai National Wildlife Refuge.

## Refuge Use Category

Other

## Refuge Use Type(s)

Cabins

## 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 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 (FWS 603 2.8) 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 2004 compatibility determination for the public use of cabins. The use of cabins on the Refuge by the public has occurred since refuge establishment in 1941. In 2004, the Refuge developed a Cabin Management Plan, associated Environmental Assessment (EA) and Finding of No Significant Impact (USFWS 2004). The Plan was subsequently amended in 2009 (USFWS 2009). This Plan called for an enhanced cabin management program on the Refuge. It allowed for new public use cabins to be constructed in non-Wilderness areas, increased opportunity for overnight stay and enjoyment of several historic cabins, established a reservation and permit system for some cabins, increased levels of maintenance and patrols associated with cabins, and enhanced historical interpretation of cabins and cabin sites. Overnight stay limits are controlled by Refuge-specific regulations (50 CFR 36.39). This use is consistent with this Plan and these Refuge-specific regulations.

What is the use?

We allow the use of certain Refuge-maintained cabins by the public consistent with the Refuge 2004 Cabin Management Plan, as amended, and Refuge-specific regulations (50 CFR 36.39(i)(8)). The use of cabins also requires other uses such as canoeing/kayaking, hiking/snowshoeing, skiing, horseback riding, use of motorboats, use of airplanes, and/or use of snowmachines for transportation to and from. These incidental uses are not evaluated in this compatibility determination, but are evaluated in their respective compatibility determinations.

Is the use a priority public use?

No

Where would the use be conducted?

Sixteen cabins are currently available for overnight use by the public (Table 1 & Figures 1 & 2). Seven of these cabins are of modern construction while the remaining 9 cabins are historic cabins. Of these 9 historic cabins, 6 are located within the Kenai Wilderness (Caribou Island, Pipe Creek, Doroshin Bay, Vogel Lake, Big Bay and Emma Lake cabins). There are no cabins of modern construction located within designated Wilderness.

Fourteen of the 16 cabins are located adjacent to a lake while the remaining 2 cabins (Big Indian Creek and Pincher Creek) are in close proximity to a water source. Three cabins are road-accessible by vehicle with only a short hike along an established trail required to reach them (Upper Ohmer Lake, Engineer Lake and Kelly Lake cabins). Another high visitation cabin, Dolly Varden Lake cabin, is accessible after a short paddle from the nearest launch point. The remaining cabins require either a longer paddle, a motorboat, or an airplane to access during the summer months or a snowmachine to access during the winter months when the refuge is open to snowmachining.

Nine cabins are designated for administrative use (Table 1). The administrative use of these 9 cabins by the Refuge would not normally require a determination of compatibility but their use as interpretive displays off the Refuge by others and/or their possible use as emergency shelters has led to their inclusion and evaluation within this CD.

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).

**Table 1. Kenai National Wildlife Refuge Cabins**

Modern Cabins (Reservations Required)	Historic Cabins (Reservations Required)	Historic Cabins (1 <sup>st</sup> Come, 1 <sup>st</sup> Served)	Administrative Cabins
Upper Ohmer Lake	Caribou Island	Emma Lake	Harry Johnson Cabin <sup>1</sup>
Engineer Lake	Nurses	Trapper Joe Lake	Lindgren/Renfrew Cabin <sup>2</sup>
Dolly Varden	Pipe Creek		Berg Home Cabin <sup>1</sup>
Snag Lake	Doroshin Bay		Berg Homestead Cabin <sup>4</sup>
McLain Lake	Vogel Lake		Moose Creek Sauna & Shed
Pincher Creek	Big Bay		Erickson/Slackwater Cabin <sup>3</sup>
Kelly Lake	Big Indian Creek		Elwell Guest Cabin <sup>4</sup>
			Enstar Cabin
			Skilak Guard Cabin <sup>4</sup>

<sup>1</sup>National Register of Historic Places

<sup>2</sup>On loan for interpretive display to Kenaitze Indian Tribe

<sup>3</sup>On loan for interpretive display Kasilof Regional Historical Association

<sup>4</sup>Refuge interpretive display or seasonal residence. Excluded from this CD.

## When would the use be conducted?

Year-round. Each cabin is normally closed approximately 33 days per year for maintenance activities but is otherwise available for reservations/use outside of maintenance days. Occasionally, cabins may have a longer closure in order to address larger maintenance issues or facilitate administrative use.

## How would the use be conducted?

Fourteen cabins are available for reservations through the Recreation.gov website with a fee. Two cabins (Trapper Joe Lake and Emma Lake) are available on a first-come first-served basis with no accompanying fee. The use of cabins is subject to occupancy and length of stay limitations. Refuge-specific regulations (50 CFR 36.39) limit the use of a cabin to a maximum of 7 consecutive days. Each cabin has its own occupancy limit that is outlined in the recreation.gov website. Use fees are evaluated periodically by the Refuge to ensure that they are comparable for fees of similar structures on adjacent federal properties. Cabin use fees were reassessed during 2023 and a new fee structure has been proposed but not yet approved and instituted.

Nine cabins are designated for administrative use. Two cabins are on long term loan as interpretive displays/artifacts. Three cabins are maintained as historic structures and only available for emergency public use should it be necessary. One additional administrative cabin is a more modern structure, is in poor condition, and only available for emergency public use. Two cabins are located near the Refuge headquarters and are used for interpretation and their continued use by the Refuge does not require a determination of compatibility. One cabin is used seasonally as a Refuge residence and also does not require a determination of compatibility.

The level of use of cabins varies according to their accessibility. Upper Ohmer Lake cabin is our highest use cabin (277 nights of occupancy during an average year) and is one of the most easily accessible with only a short hike from the parking area. Other cabins accessible with a short hike from a road, such as Engineer Lake Cabin or Kelly Lake Cabin, average around 240 nights of occupancy per year. Snag Lake cabin is only accessible by float plane during ice-free months or snowmachine with adequate snow cover during winter months and has the lowest reported average use at 9 nights per year.

## Why is this use being reevaluated?

The use of cabins by the public 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.

Public use cabins facilitate a variety of public uses on the Refuge including hunting, fishing, boating, wildlife viewing, photography, camping, trapping, snowmobiling, skiing, hiking, snowshoeing, and other related outdoor recreational experiences. Cabins also help facilitate gathering and harvest of wild foods for subsistence purposes. These activities would take place in the absence of cabins, but use levels, locations of use, safety, harvest success and the enjoyment of the experience may all be positively impacted by the presence of cabins. Cabins also can serve as a focus of historic education and interpretation and can be the sole reason for some visits to the cabin sites.

### **Availability of Resources**

Management of reservations for the 14 public use cabins requiring a reservation is done through the [www.recreation.gov](http://www.recreation.gov) website. Funds generated through reservations assist the Refuge in the annual maintenance of these structures (Table 2). These reservation fees do not provide sufficient funds to fully cover the salary of the one full-time staff member and the seasonal crewmember who conduct monitoring and maintenance activities nor for the supplies and equipment utilized. Operational and maintenance funds are used to supplement the use fees in order to maintain these structures. The 9 historic cabins listed in Table 1, as well as other historic structures that are used for administrative purposes, require staff and maintenance costs regardless of their use by the public to maintain. The Refuge has not attempted to differentiate the costs of annual and recurring maintenance for cabins utilized for public use from similar cabins and other structures utilized for administrative purposes or for interpretation. To-date, through a combination of fees generated from reservations and appropriated operational and maintenance funding, funds have been sufficient to conduct routine and recurrent administrative activities and maintenance.

Additional administrative costs associated with cabins are incurred for providing information on Refuge cabins to the public, routine law enforcement patrols, and for monitoring and, if necessary, control of invasive plant species at cabin sites conducted by Refuge biological staff. Considering how popular the road-accessible cabins (Upper Ohmer, Engineer, Kelly, and Dolly Varden cabins) are throughout the year, the Refuge may incur future one-time costs associated with construction and planning for additions to the cabin program.

#### **One-time costs**

One-time expenses would be incurred should the decision be made to add an additional cabin to the cabin use program. Any additional cabin would be evaluated

for NEPA compliance and an amendment may be needed to the existing Cabin Management Plan Environmental Assessment. No One-time costs are projected for this compatibility determination.

### Annual/recurring expenses

Labor associated with the maintenance and monitoring of cabins is the greatest expense associated with the cabin program. Labor costs for a full-time cabin manager, seasonal cabin maintenance helper, law enforcement, fire and biological staff is estimated to total \$140,000 annually. An additional \$20,000 is needed for annual maintenance supplies. Monitoring expenses total approximately \$10,000 which is primarily aviation travel to remote cabins and fuel for travel by truck/boat to more accessible cabins. Monitoring is needed to ensure safety of visitors, structural needs of the cabin and monitoring for invasive species and other habitat impacts. Also included is the cost for removal of fuels for fire protection and the removal of beetle-killed spruce trees that may pose a danger to the cabin or visitors. A minor amount of funds (less than \$250) is estimated for updating signage and brochures annually.

### Off-setting Revenue

From November 2020 to November 2021, fees of \$64,950 were generated to support this use from cabin use reservation fees.

**Table 2. Costs to Administer and Manage Cabin Use**

Category and Itemization	One-time Cost	Recurring Annual Expenses
Develop Plan/NEPA document/opening package	--	--
Construct facilities	--	--
Develop signage and brochures	--	\$250
Staff time (LE, administration and management)	--	\$140,000
Maintenance	--	\$20,000
Monitoring	--	\$10,000
<b>Total one-time expenses</b>	<b>--</b>	<b>--</b>

Category and Itemization	One-time Cost	Recurring Annual Expenses
Total recurring annual expenses	--	\$170,250
Offsetting revenues	--	-\$65,000
Total expenses	--	\$105,250

### 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. The environmental impacts of cabin use by the public has been more thoroughly detailed in the Cabin Management Plan Environmental Assessment and Finding of No Significant Impact (USFWS 2004). This compatibility determination includes a brief synopsis of the anticipated impacts and a more in-depth written analyses of the environmental consequences on a resource only when the impacts on that resource differ in some way from the Cabin Management Plan Environmental Assessment. This analysis focuses on impacts related to use of the 16 public use cabins (14 reservation and 2 first-come first serve), as most impacts associated with administrative cabin use are considered negligible, and in all cases would be comparable to or less than those impacts related use of designated public use cabins. 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; threatened and endangered species, geology and soils, air quality, floodplains, refuge management and operations and socioeconomics.

#### Wildlife and Aquatic Species, Habitat and Vegetation

For cabin use associated with an otherwise permitted activity (such as fishing or hunting) and where the number of participants is not increased due to the availability of a cabin, we do not anticipate impacts beyond short-term and localized disturbance which would not result in any measurable changes to fish, wildlife or plant populations or habitats within the Refuge. Cabin use by the public where an increase to group size or length of stay due to the cabin accommodations or in instances where visitation would not occur except for the presence of a cabin, we would expect impacts from disturbance to fish and wildlife or potential for habitat impacts would increase. It is believed that disturbance above that created from an otherwise permitted activity will occur at the 4 cabins that are relatively

easily accessible and have high visitation and thus concentrated public use (Upper Ohmer Lake, Engineer Lake, Kelly Lake and Dolly Varden Lake cabins). Impacts to wildlife may result in avoidance of the immediate vicinity of these cabins. Impacts to vegetation would be greater than would occur without the presence of a cabin.

Certain wildlife species can become habituated to human presence at cabins and may become food conditioned through intentional or inadvertent feeding. Food conditioning increases potential for human-bear conflicts, affecting public safety and often resulting in negative consequences for bears. To reduce potential for human-bear conflicts and other human-wildlife interactions, we require visitors to follow stewardship practices that reduce opportunities for bears and other wildlife to receive an anthropogenic food reward. Therefore, food, including pet food, must be stored in cabins, bear-resistant coolers, or bear-resistant panniers. Garbage must also be stored in cabins and packed out at the end of the trip. We also recommend burning off any food on grills for ten minutes after use. For safety, we strongly recommend carrying bear spray and that people hike in groups of three or more and make noise while hiking to reduce a surprise encounter with a bear.

Visitors can unintentionally bring terrestrial and aquatic invasive species to cabins as well as the areas people use to access cabins. Some soil disturbance from foot traffic occurs, particularly at the high visitation cabins, which can increase the potential for invasive species establishment. Vectors include float planes, vehicle tires, horses, clothes, and shoes. The refuge routinely surveys for early detection, and treats areas, as necessary, around cabins, campgrounds, trails, lakes, streams, rivers, parking lots, and roadsides as part of recurrent efforts to prevent larger scale infestations and prevent encroachment of terrestrial and aquatic invasive species into remote areas currently free of them.

## Water quality

Leave-no-trace practices are promoted by the Refuge. Improper management of human waste and littering with toilet paper are recurrent impacts associated with backcountry use of the Refuge regardless of the activity. Deposition of solid human waste within 100 feet of the annual mean high water level of any wetland, lake, pond, spring, river or stream and within 100 feet of a campsite or trail, while prohibited by regulation, is observed in many areas. The presence of an outhouse at each cabin reduces this impact.

## Wilderness

The Wilderness Act defines wilderness as being without permanent improvements or human habitation. The Wilderness Act also allows for areas that contain features of educational or historical value. ANILCA allows the retention and replacement of existing cabins and the limited construction of new cabins within Wilderness.

While there are no modern public use cabins within designated Wilderness, 6 of the historic public use cabins (Caribou Island, Pipe Creek, Doroshin Bay, Vogel Lake, Big Bay and Emma Lake cabins) are located in the Kenai Wilderness. Backcountry cabins support opportunities for solitude and primitive recreation in the Kenai Wilderness. Structures within Wilderness impact the undeveloped quality of wilderness character. Administrative regulations related to cabin use impact opportunities for unconfined recreation, and presence of visitors at a cabin may impact opportunities for solitude for some wilderness visitors. Plaques within the cabins note their historical value and provide educational information to visitors.

### Visitor Use and experience

Cabin use is often associated with an individual participating in another permitted activity (e.g. hunting, fishing, hiking, etc.). To the extent that the cabin assists the user in safely conducting those associated activities, the presence of a cabin positively impacts visitor use and experience.

The presence of a cabin can impact other users recreating in the area. By regulation, tent camping is prohibited within 600 feet of a cabin if not a member of the party that is renting the cabin for the night. This may require a user to camp at a less desirable site.

To enhance public safety, the discharge of firearms is prohibited within ¼ mile of any public use cabin, which in effect restricts hunting near cabins. This impacts hunting opportunity on approximately 2,000 acres (i.e. 16 cabins x 126 acres per cabin) of this nearly 2 million acre Refuge.

### Cultural Resources

Nine cabins used for public use are historic cabins. Prior to allowing public use at historic cabins and prior to maintenance being conducted on historic cabins, review per Section 106 of the National Historic Preservation Act was completed. This helps ensure that impacts to cultural or historic resources are avoided or minimized.

In 2019, 5 of these historic cabins were surveyed and recommendations provided for preservation (USFWS 2020). Vandalism was noted to have occurred at 2 public use cabins. Vandalism was also noted in the same report at an historic administrative cabin. Vandalism documented included initials carved into the wood of the cabin, ammunition cartridges driven into log butts and bullet holes in cabin logs.

### Subsistence

Opportunities for subsistence users to utilize Refuge cabins help facilitate

gathering and harvest of wild foods for subsistence purposes.

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

Cabins of varying sizes, uses, and locations have long been associated with the Refuge. Most historic cabins were used as shelters by early trappers, hunters and hunting guides, or gold miners. Some cabins were built to serve as short-term overnight shelter for occasional use while others served as long-term accommodations.

Sixteen cabins are now designated for public use and 14 of these are available by reservation while 2 are on a first-come first-served basis. Refuge public use cabins help facilitate a variety of other compatible public uses including several priority Refuge System uses, specifically hunting, fishing, wildlife viewing and photography. The presence of cabins also enhances safety of refuge visitors, particularly in backcountry settings.

### Short-term impacts

Wildlife – Disturbance impacts to wildlife at many public use cabins (up to 12 of the 16 cabins) would be considered minor and short-term given the limited number of days of use by the public per year (less than 150 days/year).

### Long-term impacts

Wildlife and plants – Long-term disturbance impacts to wildlife may occur at the 4 public use cabins that have high visitation (Upper Ohmer Lake, Engineer Lake, Kelly Lake and Dolly Varden Lake cabins). Some species of wildlife may avoid areas around these 4 cabins due to past and recurrent disturbance from visitors.

Human-bear conflicts arising from food conditioning of bears that obtain human or pet foods, which increase risk to public safety and sometimes result in bear mortality through defense of life or property takings or lethal management action by agencies, are an ongoing and recurrent issue. Regulations regarding food storage are in place to reduce the potential for food-conditioning of bears and other wildlife. Ongoing public education and enforcement efforts by the Refuge and partner agencies are necessary and further mitigate this impact.

Potential for introduction of invasive species by the public when accessing cabin sites is a long-term impact which must be monitored. The Refuge mitigates this impact by employing early detection and rapid response as part of an overall integrated pest management strategy. Focus is on control and prevention of large scale infestations in high use areas where risk is greatest and preventing establishment in remote areas. Accessible cabins are monitored annually while

remote cabins are intermittently surveyed. Invasive species found are treated as necessary. Public education is focused on reducing potential for introductions of injurious invasive species such as *Elodea*, an aquatic invasive with high potential to negatively impact freshwater ecosystems.

Water quality - Each public use cabin has an outhouse. The presence of a properly located outhouse away from waterways and waterbodies helps protect water quality over the long-term.

Wilderness - Cabins support opportunities for visitors to enjoy primitive recreation and experience solitude in the Kenai Wilderness. For some visitors, cabins make a remote backcountry experience in a wilderness setting possible.

Maintaining the 6 public use cabins located within designated Wilderness represents a long-term negative impact to the undeveloped quality of the Kenai Wilderness. Cabins within Refuge wilderness are historic structures and as heritage resources their presence and maintenance supports the recreational and historic use public purposes of Wilderness.

Administrative regulations related to cabin use, the reservation system and fee requirement negatively impact opportunities for unconfined recreation, and the recurrent presence of visitors at a cabin is a potential long-term negative impact on opportunities for solitude for other users in the vicinity.

Visitor use and experience - Positive long-term impacts of administering the Refuge's public use cabin program through a reservation system and under specific regulations include an enhanced experience for cabin users, reduced potential for wildlife conflicts and conflicts between users, and enhanced public safety.

Restrictions on camping within 600 feet of a public use cabin and restrictions on discharge of a firearm within  $\frac{1}{4}$  mile of a public use cabin could be considered a long-term negative impact to visitors who have not reserved a cabin and/or are prohibited from participating in an otherwise permitted activity in the areas adjacent to cabins. However, these regulations affect public uses in a very small area (approximately 2000 acres) of this nearly 2 million-acre Refuge.

Cultural resources - Both positive and negative long-term impacts may occur to cultural resources. The nine historic cabins that are part of the public use program are only a fraction of the over 100 historic cabins and cabin ruins and remnants that are found on the Refuge. These nine cabins, through restoration and ongoing maintenance, are positively impacted and serve as representation of the many other cabins that have been lost over the history of modern human occupation on the Kenai Peninsula. The use of these cabins by the public may result in long-term negative impacts if vandalism, arson or accidental damage occurs.

## **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 the State of Alaska provided comments on this CD. A summary of those comments and any changes made are included as Attachment 1 – Public Comment Analysis.

## **Determination**

Use is Compatible with the Following Stipulations.

### **Stipulations Necessary to Ensure Compatibility**

The following stipulations governing administration of the Refuge cabin management program are in place to ensure compatibility with Refuge purposes and the Refuge System mission. Stipulations 1-7 are derived from the Cabin Management Plan (USFWS 2004). Stipulations 3, 5, 6 and 8 are also refuge-specific regulations (50 CFR 36.39) or a general Refuge System regulation (50 CFR 27.52) in place to protect resources, enhance public safety and/or enhance visitor experience by reducing conflicts between users.

- 1) The use of cabins by the public will only be maintained and sustained if adequate resources are available to ensure adequate administration of the program, including maintenance to uphold public safety standards, monitoring for wildlife concerns and to prevent or reduce impacts from invasive species, actions to ensure Wilderness stewardship, historic preservation legal compliance, public education and outreach, and enforcement of applicable regulations to protect resources and public safety.
- 2) Periodic assessment of cabin use reservation rates will occur to ensure rates are comparable to similar cabin use rates on adjacent federal or state properties.
- 3) Cabin reservations do not grant the exclusive use of any area of the refuge, outside of the cabin itself, by the user although camping within 600 feet of any public use cabin and the discharge of firearms within ¼ mile of any public use cabin is prohibited.
- 4) Seasonal or other restrictions on cabin use (or their ultimate removal or relocation) will be imposed to reduce or eliminate documented problems with wildlife.

- 5) A seven day maximum length of stay by any group at one site will be imposed.
- 6) All food, beverages, personal hygiene items, odiferous refuse, or any other item that may attract bears or other wildlife, and all equipment used to transport, store, or cook these items must be locked in the cabin or in a commercially produced and certified bear-resistant container or immediately accessible to at least one person who is outside and attending to the items.
- 7) No new cabin construction will occur in designated Wilderness areas.
- 8) It is illegal to introduce invasive species onto a National Wildlife Refuge (50 CFR 27.52) and the State of Alaska (5 AAC 92.141, 5 AAC 34.075, 5 AAC 41.075). Visitors must comply with State and Federal laws. Best management practices shall be taken so that no invasive plants, insects, other invertebrates, or animals are introduced to refuge habitats.

## Justification

Staying in a Refuge public use cabin has become integral to the use and enjoyment of the Refuge for many visitors, and a use through which the public can develop and foster knowledge and appreciation for the Refuge, its resources and history.

Based on available information and best professional judgement, the Service has determined that cabin use by the public at Kenai National Wildlife Refuge, in accordance with the stipulations provided above, would not materially interfere with or detract from the fulfillment of Refuge purposes and the National Wildlife Refuge System mission. Availability of public use cabins facilitates a variety of other compatible recreational uses on the Refuge including Refuge System priority uses of hunting, fishing, and wildlife viewing and photography, and other recreational activities including hiking, canoeing and kayaking, snowmachining, trapping, skiing and snowshoeing. Cabins help facilitate subsistence uses and enhance safety for Refuge users, particularly in backcountry settings.

Cabin use, as outlined in this compatibility determination and with continued oversight and management by the Refuge to mitigate for potential and realized impacts to biological resources and water quality, 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 12, 2033

## **Literature Cited/References**

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

USFWS. 2004. Kenai National Wildlife Refuge Cabin Management Plan and Final Environmental Assessment. Soldotna, Alaska: U.S. Fish and Wildlife Service. 60 pp.

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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.

USFWS. 2020. A Historic Structure Survey Report and Preservation Recommendations for Six Public Use Cabins on the Kenai National Wildlife Refuge, Kenai Peninsula, Alaska. Soldotna, Alaska: U.S. Fish and Wildlife Service. 250 pp.

# Figures

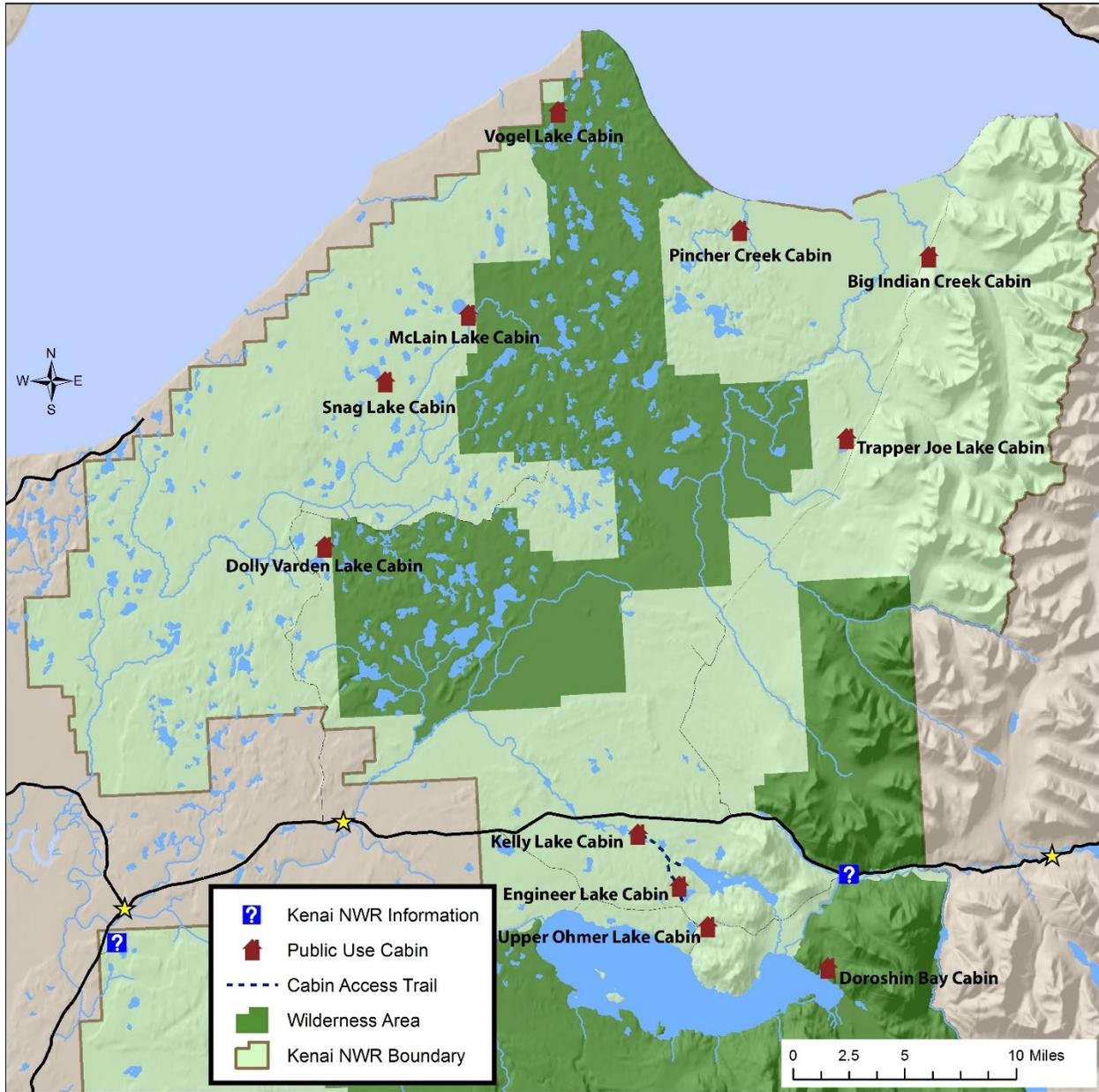


Figure 1 Public Use Cabins Available North of Skilak Lake



Figure 2 Public Use Cabins Available Near Tustumena Lake

## Public Comment Analysis for the Compatibility Determination for Cabin Use at Kenai National Wildlife Refuge

### Introduction

The public comment period for the draft Compatibility Determination (CD) for Cabin Use at Kenai National Wildlife Refuge (Refuge) began on May 24, 2023 and concluded on June 23, 2023, for a total of 31 days. Notice was provided by press release, Refuge website and legal notice in the Anchorage Daily News. Prior to the public comment period coordination occurred with local Tribes and Tribal Corporations as well as the State of Alaska (SOA).

### Results

Comments during this period were received from only the SOA. The SOA was supportive of finding cabin use compatible but asked for several changes within the document. Below is a summary of these comments and the resulting changes, if any.

- The SOA 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.
- The SOA requested specific wording change within the Refuges Purposes and Establishing and Acquisition Authorities in regards to Wilderness and specific ANILCA provisions governing Wilderness management in Alaska. Comment was noted but no changes were made in response to this comment.
- The SOA requested that the Mission Statement of the National Wildlife Refuge System be replaced with alternate text from the National Wildlife Refuge System (NWRS) Improvement Act. As this mission statement is taken word-for-word from the NWRS Improvement Act and this is the official mission statement of the NWRS, no change was made as a result of this comment.
- The SOA in two comments requested that a new cabin within Wilderness be found compatible citing the Regional Policy for Permitted Cabins (RW-1) as well as ANILCA. No change was made as a result of this comment. This CD evaluates the public use cabin program. The Regional Cabin Policy deals with permitted cabins which is outside the scope of this CD. Any change regarding the placement of a new public use cabin within Wilderness would require an update to the 2004 Kenai NWR Cabin Management Plan and associated National Environmental Policy Act (NEPA) analysis. Following or concurrent with any change in the Kenai NWR Cabin Management Plan, compatibility would need to be re-assessed. No change was made in response to this comment.
- The SOA noted the Regional Policy for Permitted Cabins (RW-1) and requested we include this policy citation. The Regional Cabin Policy deals with permitted cabins and is outside the scope of this CD which evaluates Kenai NWR’s public use cabin program. No change was made as a result of this comment.
- The SOA requested that we evaluate access methods within this CD. Methods of access are evaluated within their own CD. No change was made as a result of this comment.
- The SOA asked for an update on the status of cabins that were not included within this CD (identified in Table 1). This CD evaluated the use of the cabins within the 2004 Kenai NWR Cabin

Management Plan (as amended in 2009) designated for public use. Although included in the review of compatibility, Table 1 did not list by name administrative cabins and cabins that are maintained for interpretation or emergency use. The Berg Home Cabin and Harry Johnson Cabin are both listed on the National Register of Historic Places and are maintained as historic interpretive structures not for occupancy by the public either by reservation or on a first-come-first-serve basis, although either could serve as a shelter in an emergency. A report of the condition of the Berg Home cabin as well as 5 other cabins (Caribou Island, Nurses, Pipe Creek, Doroshin Bay and Big Bay cabins) can be found here:

<https://ecos.fws.gov/ServCat/Reference/Profile/139261>. As noted in the 2004 Cabin Management Plan (and the 2009 amendment), the Enstar cabin was a permitted cabin (not a public use cabin) owned by Enstar Natural Gas Company. Although it was noted in the Plan that it was used by the public unofficially, this cabin was not a Refuge asset at that time. The Enstar Cabin was transferred to the Refuge in 2015, by which time its condition was poor. This building would need to be replaced should we decide to include it as a public use cabin. In 2005, under an MOA with Kenai Native Association, the Renfrew (also known as Lindgren) Cabin was moved from the Refuge to a site designated by KNA and is on loan to them for interpretive use. Also in 2005, the cabin at Big Indian Airstrip was determined to not be salvageable and was replaced by moving a cabin from Little Indian Creek to a location near this structure's original location. This cabin is available for public use and is called Big Indian Creek Cabin. The structure identified as Chickaloon Cabin in the 2004 Cabin Management Plan was replaced with a new cabin in 2008 in a drier location and is now called Pincher Creek Cabin and is available for public use. Any change in the status or use of these or other cabins would require amendment of the Cabin Management Plan. No changes were made as a result of this comment.

- The SOA asked that we clarify the reason for the CD review under 603 FW 2.11(H). Within the CD, “Under Why is this use being proposed or reevaluated?”, we state that this CD is being reviewed to comply with the minimum reevaluation requirement. No change was made as a result of this comment.
- The SOA requested clarification on what information was being conveyed in “Table 2. Cost to Administer and Manage Cabin Use” and asked that the table be moved closer to where it is cited. In order for a use to be found compatible, it must be shown that adequate resources (funding, personnel and other infrastructure) are available to properly and safely administer the use. Table 2 attempts to summarize the costs of the public use cabin management program on an annual basis. As the table summarizes all information provided above it in this section, no change was made as a result of this comment.
- The SOA stated that it is unclear how many new cabins may be constructed under this compatibility determination and suggested finding 3 new cabins compatible. Any change in the number of cabins available for public use would occur through an amended or new Cabin Management Plan. The mention of a new cabin occurred under the “One-time costs” section and stated that a new cabin would only be constructed should a new Cabin Management Plan call for it and, therefore, no one-time costs were being projected (i.e. no new cabins are currently planned). No change occurred as a result of this comment.
- The SOA had two comments questioning our conclusion that the presence of a cabin within Wilderness impacted a person’s opportunity for solitude within Wilderness. The Wilderness Act defines wilderness as having, "outstanding opportunities for solitude or a primitive and

unconfined type of recreation." This quality is preserved when the opportunity for people to experience wilderness in terms of the visitor's sense of solitude, and their expectation for an undeveloped environment with minimal restrictions is available. The presence of a cabin in Wilderness, we believe, is likely to negatively impact that expectation for those Wilderness users that enter Kenai Wilderness not knowing that there is cabin in that location. No change was made as a result of this comment.

- The SOA requested wording be added to Stipulation 4 regarding notification of Congress should a cabin be proposed to be removed. This stipulation is derived from the Cabin Management Plan and is needed to ensure compatibility. The notification procedures cited (ANILCA 1315(d)) apply only to the limited number of cabins in Wilderness and are a procedural requirement by law. As this citation only applies to a limited number of cabins, no change was made as a result of this comment.
- The SOA requested a wording change for Stipulation 8 to align with the corresponding State regulation regarding invasive species. We agree that the difference in wording may cause confusion. The wording discrepancy applies to animal feed/forage which corresponds to methods of access but not the use of cabins by the public. We have deleted the sentence in question from this stipulation and changed the wording to align with this comment. Our commitment to reducing the risk of introduction of invasive species would not be diminished with this change.
- The SOA requested the removal of Stipulation 9 as it relates to subsistence. The State noted that if the ANILCA 810 analysis determined that a significant restriction on subsistence uses, a notice and subsequent hearing should be held. An ANILCA Section 810 analysis was completed for all existing refuge uses, including public use cabins, concurrent with the Kenai NWR's 2010 Comprehensive Conservation Plan, and uses were found to not significantly impact subsistence uses. The inclusion of a specific stipulation addressing impacts to subsistence uses was found to not be necessary, and Stipulation 9 was removed.
- The SOA requested that cabin use be designated as a traditional activity within this compatibility determination. The legislative history of ANILCA includes four examples of "traditional activities": subsistence and sport hunting, fishing, and berry picking. The U.S. Fish and Wildlife Service has never formally adopted a legal definition of "traditional activity" or formally designated which activities are "traditional" on Kenai NWR or on any national wildlife refuge in Alaska. This and previous compatibility determinations do recognize that cabin use occurred on the Kenai NWR historically, and that cabin use helps facilitate these traditional activities, including by subsistence users, as well as several other recreational activities. Cabin use also occurs on the Kenai NWR as a recreational activity onto itself, not associated with conducting other activities. Lastly, whether or not cabin use is a "traditional activity" as referenced under ANILCA on Kenai NWR, we have a legal requirement to determine whether this activity, as currently administered on Kenai NWR, is compatible with Refuge purposes and the Refuge System mission. No changes were made in response to this comment.