
National Park Service
U.S. Department of the Interior

Noatak National Preserve
Alaska



**Proposed Construction of a New Subsistence Cabin in
Noatak National Preserve
Environmental Assessment
November 2008**



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Note to Reviewers

If you wish to comment on this document, you may mail comments to:

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PURPOSE AND NEED

Noatak National Preserve (NOAT) is considering a permit application for constructing one cabin for subsistence activities within NOAT (figure 1). The applicant is a local rural resident and qualified NOAT subsistence user from Noatak, Alaska. The requested cabin would be located on an island near the confluence of the Noatak and Kuguroruk Rivers. The cabin site is located above mean high water mark. The channel behind the island carries water when the river is in flood but is typically dry. The island is covered with willow, alder, and spruce.

The applicant identifies the following reasons for needing a cabin at the fishing site:

- The river current at his existing cabin, which is located on private land, is too fast for using a net so he's been using a fish camp 2.6 miles downstream from his cabin. He is now requesting a cabin to support his subsistence gill net fishing activities.
- Bears are destroying his harvest at the fish camp. A cabin would afford him personal protection and would allow him to better protect his harvest.
- It is challenging to camp and work in cold rain and wet snow. A cabin would provide more comfortable living and working conditions.
- Slime on the rocks makes it difficult to travel back and forth between his cabin (located on private land) and the fish camp. A cabin at the fish camp would allow him to more comfortably remain at his fishing location during the fishing seasons.

This Environmental Assessment (EA) analyzes a No Action Alternative, the Applicant's Proposed Alternative, and the Environmentally Preferred Alternative and has been prepared in accordance with the National Environmental Policy Act of 1969 and regulations promulgated by the Council of Environmental Quality in Title 40 of the Code of Federal Regulations (CFR).

Legal Context

The 1916 Organic Act directed the Secretary of the Interior and the NPS to manage units of the national park system to:

“...conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” (16 U.S.C. 1.)

The purposes for which Noatak National Preserve was created are found in the language of the 1980 Alaska National Interest Lands Conservation Act (ANILCA, Pub. L. 96-487). Section 201(8)(a) of ANILCA states that Noatak National Preserve is to be managed for the following specific purposes:

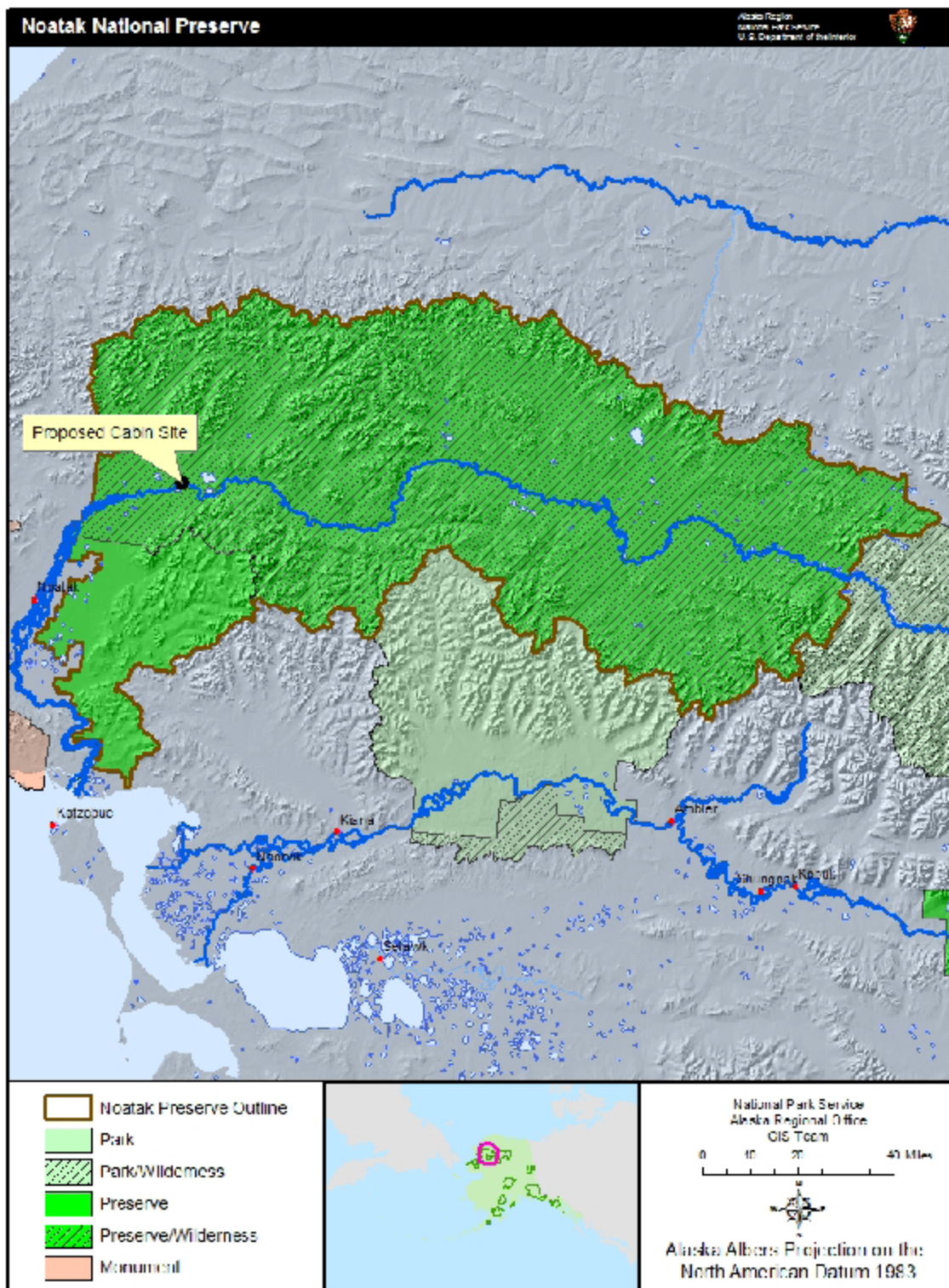


Figure 1. Location of Noatak National Preserve and the proposed subsistence cabin location.

- to maintain the environmental integrity of the Noatak River and adjacent uplands within the preserve in such a manner as to assure the continuation of geological and biological processes unimpaired by adverse human activity;
- to protect habitat for, and populations of, fish and wildlife, including but not limited to caribou, grizzly bears, Dall [sic] sheep, moose, wolves, and for waterfowl, raptors, and other species of birds;
- to protect archeological resources;
- and in a manner consistent with the foregoing, to provide opportunities for scientific research.

Title I of ANILCA directs the NPS to preserve the natural and cultural resources in the park and preserve for the benefit, use, education, and inspiration of present and future generations.

Section 701(7) of ANILCA designated 5.8 million acres of NOAT as Wilderness. According to the Wilderness Act (16 USC §§ 1131-1136, 78 Stat. 890), these lands are to be “administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.”

ANILCA Section 601(33) designated the Noatak River as a Wild River from the headwaters to its confluence with the Kelly River. Section 10(a) Wild and Scenic Rivers Act states:

Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeologic, and scientific features.

Title VIII of ANILCA provides direction for managing subsistence use. Section 802(1) states:

Consistent with sound management principles, and the conservation of healthy populations of fish and wildlife, the utilization of the public lands in Alaska is to cause the least adverse impact possible on rural residents who depend upon subsistence uses of the resources of such lands...

ANILCA Section 203 states:

That hunting shall be permitted in areas designated as national preserves under the provisions of this Act. Subsistence uses by local residents shall be allowed in national preserves and, where specifically permitted by this Act, in national monuments and parks.

ANILCA Section 1313 states:

A National Preserve in Alaska shall be administered and managed as a unit of the National Park System in the same manner as a national park except as otherwise provided in this Act and except that the taking of fish and wildlife for sport purposes and subsistence uses, and trapping shall be allowed in a national preserve under applicable State and Federal law and regulation.

ANILCA Section 1303(a)(4) provides for cabin use for subsistence purposes by saying:

The Secretary may issue a permit under such conditions as he may prescribe for the temporary use, occupancy, construction and maintenance of new cabins or other structures if he determines that the use is necessary to reasonably accommodate subsistence uses or is otherwise authorized by law.

The regulations implementing this section of ANILCA are found at 36 CFR 13.160 (a). They specify that:

A local rural resident who is an eligible subsistence user may...construct a new cabin or other structure, including temporary facilities, in a portion of a park area where subsistence use is allowed, pursuant to the applicable provisions of subparts F through V of this part and the terms of a permit issued by the Superintendent.

36 CFR 13.162(a) states:

In making a decision on a permit application the Superintendent shall consider whether the use by local rural residents of a cabin or other structure for subsistence purposes is customary and traditional in that park area and shall determine whether the use and occupancy of a new or existing cabin or structure is “necessary to reasonably accommodate” the applicant’s subsistence uses. In making this determination, the Superintendent shall examine the applicant’s particular circumstances, including but not limited to his or her past patterns of subsistence use plans, reasonable subsistence use alternatives, the specific nature of the subsistence uses to be accommodated by the cabin or structure, the impacts of the cabin or structure on other local rural residents who depend on subsistence uses and the impacts of the proposed structure and activities on the values and purposes for which the park area was established.

36 CFR 13.162(b) states:

The Superintendent may permit the construction of a new cabin or other new structure for subsistence purposes only if a tent or other temporary facility would not adequately and reasonably accommodate the applicant’s subsistence uses without significant hardship and the use of no other type of cabin or other structure provided for in this section can adequately and reasonably accommodate the applicant’s subsistence uses with a lesser impact on the values and purposes for which the park area was established.

36 CFR 13.166 states:

A temporary facility or structure directly and necessarily related to the taking of subsistence resources may be constructed and used by a qualified subsistence user without a permit so long as such use is for less than thirty days and the site is returned to a natural condition. The Superintendent may establish conditions and standards governing the use or construction of these temporary structures and facilities which shall be published annually in accordance with Section 1.7 of this chapter.

36 CFR 13.168 states:

In any permit authorizing the construction of a cabin or other structure necessary to reasonably accommodate authorized subsistence uses, the Superintendent shall provide for shared use of the facility by the permittee and other local rural residents rather than for exclusive use by the permittee.

Background

The applicant has been using this part of NOAT for subsistence fishing, hunting, trapping, and gathering berries, wild plants, and wood his entire life. His family has used this area for at least 100 years. The applicant participates in customary and traditional subsistence activities throughout the region during the better part of each year. He spends as much as or more time in the country participating in subsistence activities than anyone else in his age group in the region (pers. comm. Lois Dalle-Molle). He provides for numerous people in Noatak. The applicant maintains very strong ties to tradition and a subsistence way of life, and he intends to continue this way of life for the long term.

He currently participates in subsistence activities from a cabin he finished constructing on private land in 1997, and from a fish camp where he is proposing to construct a new cabin. The existing cabin is located on his uncle's native allotment, approximately 2.6 miles upriver from his fishing site. Since the mid 1980s the applicant has been using a fish camp comprised of a lean-to covered in plastic, fish drying rack, campfire ring, canoe, and hole for human waste. He uses the fish camp for a short period in the spring and for about two months each fall. In 2006 he applied for a permit to construct a 12' x 16' cabin at the site of the fish camp (S20, T20N, R14W, 1:63,360 Baird Mountains D-6) (figures 1 & 2).

Subsistence fishing has long been a customary and traditional activity for Native peoples in Alaska, including lands within NOAT. Subsistence users catch chum salmon, whitefish, Arctic char, and pike in nets set in rivers, including the Noatak River. Most fishing occurs in late summer and fall. Weather can be below freezing this time of year; however, indications of a warming climate have appeared throughout the Arctic (pers. comm. Sandy Rabinowitch), and, according to the applicant's permit application, rain and sleet are becoming more common.

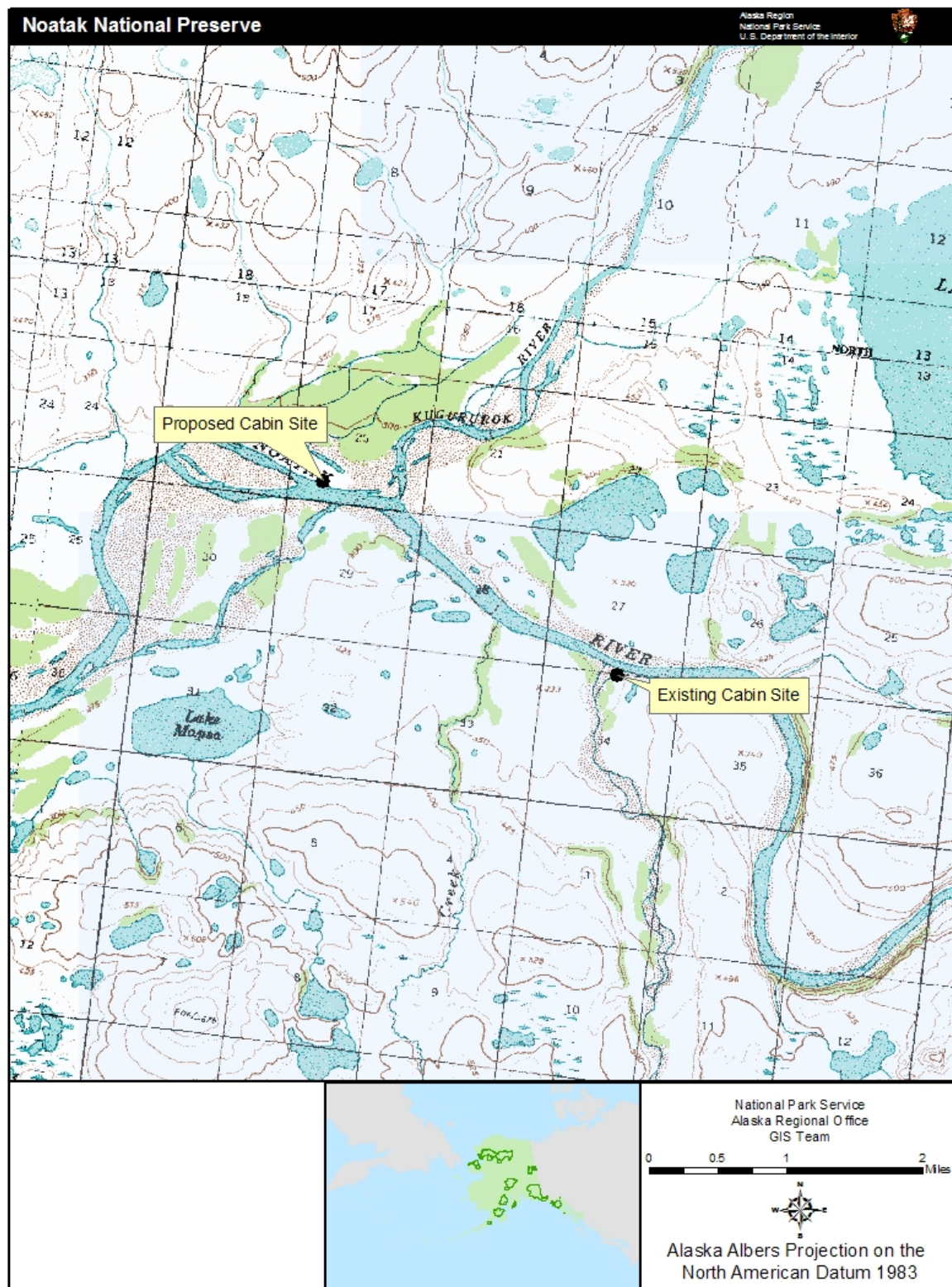


Figure 2. Proposed cabin site within Noatak National Preserve.

The use of cabins and wall tents to support subsistence activities, including fishing, are common in the region, although most cabins that exist today are located outside the Preserve boundary, closer to Noatak village along the lower Noatak River (as opposed to farther east in the Preserve where the applicant is requesting a cabin). In 1885 Brower observed log homes along the lower Noatak River (Burch 1998). A village site near the confluence of the Noatak and Kuguroruk Rivers contained homes made from a frame of logs covered by moss turf. Smith observed this village site, consisting of house pits and cache pits in 1905.

Currently there are eight cabins (three of which are NPS cabins and one of which is the applicant's existing cabin on private land) along the Noatak River from the confluence of the Kelly River upriver to the shared boundary with Gates of the Arctic National Park. Outside the Preserve, there are about 45 cabins along the Noatak River from the confluence of the Kelly River downriver to the ocean (pers. comm. Dan Stevenson).

Issues

Issues and impact topics form the basis for environmental analysis in this EA. A brief rationale is provided for each issue or topic that is analyzed in the environmental consequences section of this EA.

Fish & Wildlife: Cabin/tent platform construction and use could result in increased fish harvest because a cabin would enable the applicant to fish for a longer period of time and in more favorable working conditions. Bears attracted to a fish camp may be killed in defense of life and property.

Wilderness Values / Wild River: Cabin/tent platform construction and use could affect wilderness resource values because wilderness areas are generally without facilities. Recreational users floating the Noatak River would not see the cabin/tent platform from the river; however, permanent structures can degrade wilderness character and diminish the quality of the wilderness recreational experience.

Subsistence Use: Living conditions for subsistence users could be improved. See also Appendix A.

Issues Eliminated from Further Consideration

Cultural Resources: Cultural resources are present along the Noatak River, but cabin/tent platform construction at the selected site would not be anticipated to have any effects on these resources. The current fish camp site has not been surveyed for cultural resources by a National Park Service archeologist; however, no cultural resources impacts are anticipated (pers. comm. Bob Gal). The old village site near the confluence of the Noatak and Kuguroruk rivers would not be affected.

Threatened and Endangered Species: The Endangered Species Act requires an analysis of impacts on all federally listed threatened and endangered species. No federally designated threatened or endangered species are known to occur within Noatak National Preserve.

Vegetation and Soils: Cabin/tent platform construction would have a negligible effect on vegetation and soils in the project area since all cabin materials would be brought to the site via the Noatak River. Because the cabin/tent platform would be constructed on blocks, vegetation and soils would be minimally disturbed.

Floodplains: The cabin/tent platform construction for this project has been evaluated as per NPS DO-77-2 with respect to impacts on floodplains. The project 1) has no potential to cause impacts to floodplains in the area, 2) there is no infrastructure at risk, and 3) there are no human health and/or safety issues associated with the construction and use of this project. Based on these factors, this project is not anticipated to have any effect on floodplains within the Noatak drainage and no Floodplain Statement of Findings will be prepared for this project.

Wetlands: This project will not be constructed in wetlands and no Wetlands Statement of Findings will be prepared for this project.

Recreation: Sport fishing, river floating, and hunting account for a majority of the recreational use in the preserve. A relatively small amount of backpacking and photography also takes place. It is estimated that 300-400 visitors float the Noatak River each year (pers. comm. Dan Stevenson). The trend is for all recreational activities to increase because of publicity about the area, a growing Alaska tourism industry, and because some commercial operators will become more active in promoting and expanding their services. Nothing proposed in this plan would change the existing opportunity for recreation in the Preserve.

Natural Soundscape: Cabin/tent platform construction activities would degrade natural sounds by only a negligible amount because most of the actions would be fairly quiet by nature, and the sound baffles of the trees near the site, along with the natural sound of the Noatak River, would mitigate some of the potential noise impacts.

Local Communities/Socioeconomic Resources: Although the cabin, and to a lesser extent, the tent platform would enhance subsistence opportunities in the preserve, it would be impossible to attribute any increased monetary value to the area economy to it, or anything other than a negligible impact on socioeconomic resources.

Environmental Justice: Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This project would not result in significant changes in the socioeconomic environment of the area, and therefore is expected to have no direct or indirect impacts to minority or low-income populations or communities.

Alternatives Considered but Dismissed

Locate a Cabin Outside of Wilderness. Locating the cabin outside of Wilderness would alleviate some of the impacts to wilderness; however, this alternative was dismissed because the applicant has requested a permit to construct a cabin at a fishing site that is inside designated Wilderness. A cabin located outside of Wilderness would not be near the fishing site and would not meet the applicant's needs.

Require the Applicant to use a Bear Proof Fence. In his application for a cabin permit, the applicant stated that bears are consuming his fish harvest. Requiring the applicant to use a bear-proof fence around his fish drying rack was considered a way to ensure that the applicant's fish harvest be better protected. This was dismissed because it was determined that such a requirement placed an unreasonable burden on the applicant. It was also dismissed because of the potential inability and/or unwillingness of the applicant to use and maintain a bear-proof fence.

Permits and Approvals Needed to Complete the Project

Prior to cabin/tent platform construction, the NPS would complete a cultural resource survey and clearance as per Section 106 of the National Historic Preservation Act (NHPA).

A permit from the NOAT Superintendent to construct and maintain a subsistence cabin in NOAT pursuant to 36 CFR 13.162(a) would be required.

DESCRIPTION OF ALTERNATIVES

Alternative 1: No Action

No cabin/tent platform construction permit would be issued. Pursuant to 36 CFR 13.166 the applicant would use a temporary facility or structure for less than thirty days and the site would be returned to a natural condition.

Alternative 2: Authorize Permit to Construct New Cabin for Subsistence Purposes (Applicant's Proposed Alternative)

The applicant would be issued a permit to construct a cabin and accompanying food cache on the island near the confluence of the Noatak and Kuguroruk Rivers (S20, T20N, R14W, 1:63,360 Baird Mountains D-6) (figures 1 & 2).

The permit would authorize one 12' x 16' cabin, situated three feet off the ground, out of view of the river, and at least 50 feet from the mean high water line. It would be constructed of plywood and a tin roof. The permit would authorize an Alaska-style food cache elevated approximately 12 feet off the ground (figure 3). The permit would also authorize a fish drying

rack. Cabin, cache, and drying rack materials would be brought to the site via the Noatak River. They would remain at the site year-round. Construction could begin immediately. The applicant would plan to use the cabin for a short period in the spring and for about two months in the fall.

The cabin would be designated for shared use among subsistence users as required by 36 CFR 13.168; and would be available to other subsistence users throughout the year. Residential use would be prohibited under 36 CFR 13.164(b). Proposed permit stipulations are listed in Appendix B.

Alternative 3: Authorize Permit to Construct Tent Platform for Subsistence Purposes (Environmentally Preferred Alternative)

The applicant would be issued a permit to construct a tent platform and accompanying food cache on the island near the confluence of the Noatak and Kuguroruk Rivers (S20, T20N, R14W, 1:63,360 Baird Mountains D-6) (figures 1 & 2). Pursuant to 36 CFR 13.104, a tent platform is defined as a structure, usually made of timber products, constructed to provide a solid, level floor for a tent, with or without partial walls not exceeding three feet in height above the floor and having only the tent fabric, the ridge pole and its support poles extending higher than three feet above the floor. The permit would authorize a tent platform situated out of view of the river and at least 50 feet from the mean high water line.

The permit would also authorize an Alaska-style food cache elevated approximately 12 feet off the ground (figure 3), and a fish drying rack.



Figure 3. Example of an Alaska-style food cache.

Tent platform, cache, and drying rack materials would be brought to the site via the Noatak River. The footprint of the tent platform would be the same as for the cabin in Alternative 2. The tent fabric would be removed when not used, but the platform, accompanying poles, cache, and fish drying rack would remain year-round. Construction could begin immediately. The applicant would likely use the tent platform for a short period in the spring and for about two months in the fall.

The tent platform would be designated for shared use among subsistence users as required by 36 CFR 13.168, and would be available to other subsistence users throughout the year.

Residential use would be prohibited under 36 CFR 13.164(b). Proposed permit stipulations are listed in Appendix B.

Mitigation Measures for Alternatives 2 and 3

The site would be surveyed for cultural resources. If cultural resources are discovered, the site would be protected and the activities would stop until the park archeologist can be notified and has the opportunity to evaluate the site. If something significant is found, the cabin site may need to be relocated.

Pursuant to 36 CFR 13.118 when constructing, maintaining or repairing the cabin or tent platform, the applicant must use materials and methods that blend with and are compatible with the immediate and surrounding area. In this case, materials would be colored to blend with the surroundings.

To meet requirements of the State of Alaska Department of Environmental Conservation to keep human waste from entering into the Noatak River, the applicant would be required to dispose of human waste at least 100 feet from normal high water mark and at least 4 feet above the water level at normal high water. He would also develop a plan to prevent human waste from entering the Noatak River during floods.

Environmentally Preferred Alternative

The Environmentally Preferred Alternative is the alternative that will promote the national environmental policy expressed in the NEPA section 101(b) of the NPS DO-12 Handbook and Director's Order (NPS, 2005a). The Environmentally Preferred Alternative is the action which results in the least damage to the biological resources and environment while protecting, preserving, and enhancing the historic, cultural, and natural resources.

In this case, the difference in impacts between alternatives is very small because the actions proposed in the alternatives are similar and the area of impact is a small site within in a 6.7 million acre Preserve. Alternative 1 would create the greatest adverse impact to subsistence uses, but would result in the least adverse impact to wilderness character. Alternatives 2 and 3 would result in the least adverse impact to fish and wildlife. Alternative 2 would result in the greatest benefit to subsistence users but would create greater impacts to wilderness character. Therefore, Alternative 3 is the Environmentally Preferred Alternative because it provides the best balance of protecting wilderness and natural resource values while enhancing opportunities for subsistence activities.

Table 1. Summary of Impacts of Alternatives

Impact Topic	Alternative 1 (No Action Alternative)	Alternative 2 (Applicant's Proposed Alternative)	Alternative 3 (Environmentally Preferred Alternative)
Fish and Wildlife	<p>Minor adverse impacts from fish harvest, and possible mortality of grizzly bears killed in defense of life or property.</p> <p><i>Minor adverse cumulative impacts</i></p>	<p>Minor adverse impacts from fish harvest. It is unlikely that grizzly bears would be killed in defense of life or property due to the presence of a hard-sided cabin.</p> <p><i>Minor adverse cumulative impacts</i></p>	<p>Minor adverse impacts from fish harvest. Possible mortality of grizzly bears killed in defense of life or property in defense of life or property.</p> <p><i>Minor adverse cumulative impacts</i></p>
Wilderness Values /Wild River	<p>Negligible adverse impact from a temporary structure or facility set up for periods of less than 30 days, possibly visible from a designated Wild River.</p> <p><i>Moderate adverse cumulative impacts</i></p>	<p>Minor adverse impact from having a permanent cabin and related facilities sited in designated Wilderness and next to, but not visible from, a designated Wild River.</p> <p><i>Moderate adverse cumulative impacts</i></p>	<p>Minor adverse impact from having a permanent tent platform, poles, and related facilities sited in designated Wilderness and next to, but not visible from, a designated Wild River. Removal of tent fabric when not in use provides visual mitigation for impacts.</p> <p><i>Moderate adverse cumulative impacts</i></p>
Subsistence Use	<p>Moderate adverse impact to subsistence opportunities because the applicant could only use that site for periods less than 30 days; lack of protection from inclement weather, and lack of bear protection.</p> <p><i>No cumulative impacts</i></p>	<p>Moderate beneficial impact to subsistence opportunities due to protection against inclement weather and improved bear protection. Applicant could provide for additional people, and other subsistence users could use the cabin. Other subsistence users may feel displaced from the site.</p> <p><i>No cumulative impacts</i></p>	<p>Minor beneficial impact to subsistence opportunities due to improved protection against inclement weather and limited bear protection from a soft-sided structure. Other subsistence users could also use the tent platform. Other subsistence users may feel displaced from the site.</p> <p><i>No cumulative impacts</i></p>

AFFECTED ENVIRONMENT

Fish and Wildlife

Wildlife is a primary resource of Noatak National Preserve. Thirty-seven mammal species representing 14 families are known or believed to inhabit the Noatak valley. Included are caribou, moose, Dall's sheep, grizzly bear, wolf, fox, lynx, marten, beaver, and muskrat.

Grizzly bears frequent moist tundra and shrub associations and are found along riverbanks throughout northwest Alaska. Population estimates conducted in 2005 estimate the adult grizzly bear population at 289; however, 2008 spring bear surveys have provided data that will likely increase the population estimate (pers. comm. Brad Shults).

Approximately 22 species of fish are found within the Noatak drainage. Arctic grayling and Arctic char are the most common sport fish. Chum [dog] salmon are the most abundant species and along with Arctic char are important subsistence resources. Northern pike, whitefish, and least cisco inhabit rivers and lakes in the region.

Wilderness Values /Wild River

The proposed cabin site is located inside Noatak National Preserve in an area designated as Wilderness. The Noatak River is designated as a Wild River from the headwaters to its confluence with the Kelly River. The purpose of Noatak National Preserve is to protect an intact 6.7 million acre mountain-ringed river basin ecosystem for outstanding scientific research and wilderness opportunities within the subarctic/arctic environment.

The project area exemplifies the untrammeled, natural, and undeveloped characteristics of Wilderness, and provides outstanding opportunities for solitude or primitive/unconfined recreation. The Noatak Wilderness constitutes the western half of a 13 million acre designated arctic wilderness which limits development and protects the nation's largest unaltered river basin and free-flowing Wild River.

Subsistence Use

The Noatak River and its web of tributaries and feeder lakes is host to a variety of fish, wildlife, birds, and vegetation that are used for a variety of subsistence purposes. The archeological record indicates that people have been attracted by these resources for well over 10,000 years. These same resources, and others, continue to attract human use and provide support for local social and cultural continuity. Rural residents rely extensively on subsistence activities to meet dietary and cultural needs.

The proposed cabin site is a relatively popular fishing location. It is located about 45 miles from Noatak Village. NPS staff have observed people fishing there numerous times. The site was also selected as an alternate Alaska veteran native allotment by two different applicants. (In February 2008 the applicants selected parcels outside of the Preserve.) This shows, however, that other people besides the applicant use this site for subsistence activities. Normally subsistence users will not occupy a site regularly used by someone else for subsistence purposes without some kinship ties or permission.

IMPACTS OF THE ALTERNATIVES

Impacts identified for each issue are based on the intensity, duration, and extent of the impact. Summary impact levels are characterized as negligible, minor, moderate, or major. Impact level thresholds are defined in Table 2.

Table 2. Impact Levels

Negligible	Minor	Moderate	Major
Effects would tend to be low intensity, temporary, and would not affect unique resources.	Effects would tend to be low intensity and short duration, but common resources may sustain medium intensity and long-term effects.	Effects on common resources would tend to be medium to high intensity and long-term, while important and unique resources would tend to be affected by medium to low intensity and short-term to temporary impacts, respectively.	Effects would tend to be medium to high intensity, long-term to permanent, and affect important to unique resources.
Impairment occurs when a resource no longer fulfills the specific purposes in the enabling legislation or its role in maintaining the park's natural integrity.			

The following analysis evaluates environmental impacts from the three alternatives considered in this EA.

This analysis assumes that in Alternative 1 the applicant would continue to access the fishing site by non-motorized means. It assumes that in Alternatives 2 and 3 all permit stipulations would be followed in order to mitigate impacts. It is assumed that in Alternatives 2 and 3 the applicant would access the cabin/tent platform by non-motorized means.

It is assumed that materials for a cabin/tent platform would be brought to the site via motorboat from Noatak village. This one-time event would have a negligible impact on park resources. Under alternative 3, it is assumed that the tent fabric would be removed each year and transported via canoe 2.6 miles to the applicant's cabin. This would also have a negligible impact on park resources.

It is also assumed that there may be additional requests for permits to construct cabins or temporary facilities. It is impossible to anticipate the location or quantity of these requests and at this time is unrealistic to evaluate impacts to specific park resources. Subsequent requests will be evaluated on a case by case basis.

Fish and Wildlife

Alternative 1 (No Action Alternative)

Fish would continue to be harvested at the mouth of the Kuguroruk River. The fish population is large enough that this harvest would not affect any population parameters; populations would continue to be considered natural and healthy.

Bears may be attracted to the smell of fish at the fish camp. During periods less than 30 days, grizzly bears could be shot in defense of life or property. Since there would be no permanent structure at the fish camp, there would be no safe place to store fish once they're dried. Over the last 20 years, the applicant has reported shooting six grizzly bears in defense of life or property at his existing cabin (2.6 miles upstream from the fishing site and proposed cabin location). The number of bears potentially killed as a result of the applicant's activities would have no more than minor adverse impacts to the bear population.

Cumulative Impacts:

The grizzly bear population within the Noatak drainage is healthy. In the long term, the number of bears potentially killed each year in defense of life or property added to the legal harvest within the Noatak drainage (calculated harvest approximately 7.6% or 37 bears/year [NPS unpublished data 2005-2007]) would have no more than minor adverse impacts on this healthy bear population. Actions resulting from this alternative would contribute negligibly to the cumulative impacts of overall grizzly bear harvest.

Conclusion:

There would be a minor adverse impact to wildlife from the harvest of fish and the mortality of grizzly bears.

The impact to fish and wildlife resources would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Alternative 2 (Applicant's Proposed Alternative)

Fish would continue to be harvested at the mouth of the Kuguroruk River, and over the long term perhaps a greater number of fish would be harvested since the applicant would have more comfortable conditions in which to live and work. The fish population is large enough that a potential increase in harvest would not affect any population parameters; populations would continue to be considered natural and healthy.

Bears may be attracted to fish smells at the cabin, cache, and drying rack. These structures would be present year round, and would be likely to attract bears to the area during periods in spring and fall when they are being used to dry and store fish; however, the permit would require that the applicant use an elevated cache for fish storage to prevent confrontations between people and bears. The permit would also require that the applicant be present when fish are drying on the rack. The applicant's presence may help to deter bears approaching drying fish. Because the cabin would be a shared use facility, there is additional potential for

bear-human conflicts and there is also additional potential for human presence to drive bears away. The plywood cabin would provide the applicant and other users with some protection against bears. For these reasons it would seem unlikely that grizzly bears would be killed in defense of life or property.

The cabin might become attractive to others, especially for trapping, spring bear hunting, and occasional winter hunting of caribou. Consequently, there could be a slight increase in harvest of those wildlife resources during winter, spring, or late fall. On balance, there would be a minor adverse impact to fish and wildlife.

Cumulative Impacts:

The grizzly bear population within the Noatak drainage is healthy. In the long term, the number of bears potentially killed each year in defense of life or property added to the legal harvest within the Noatak drainage (calculated harvest approximately 7.6% or 37 bears/year [NPS unpublished data 2005-2007]) would have no more than minor adverse impacts on this healthy bear population. Actions resulting from this alternative would contribute negligibly to the cumulative impacts of overall grizzly bear harvest.

Conclusion:

There would be minor adverse impacts to wildlife from the harvest of fish and an indirect impact from an increase in hunting and trapping at the site.

The impact to wildlife, wilderness, subsistence, and cultural resources would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Alternative 3 (Environmentally Preferred Alternative)

Impacts to fish would be identical to those described in Alternative 2.

Bears may be attracted to fish smells at a tent platform, cache, and drying rack. These structures would be likely to attract bears to the area during periods in spring and fall when they are being used to dry and store fish; however, the permit would require that the applicant use an elevated cache for fish storage to prevent confrontations between subsistence users and bears. The permit would also require that the applicant be present when fish are drying on the rack. Because the tent platform would be a shared use facility, there is additional potential for bear-human conflicts and there is also additional potential for human presence to drive bears away. The tent platform may not provide ample protection for the applicant or other subsistence users so it could be expected that an occasional grizzly bear would be killed in defense of life or property.

A temporary facility might be somewhat attractive to others, especially for trapping, spring bear hunting, and occasional winter hunting of caribou. Consequently, there could be a slight increase in harvest of those wildlife resources during winter, spring, or late fall. On balance, there would be minor adverse impacts to fish and wildlife.

Cumulative Impacts:

The grizzly bear population within the Noatak drainage is healthy. In the long term, the number of bears potentially killed each year in defense of life or property added to the legal harvest within the Noatak drainage (calculated harvest approximately 7.6% or 37 bears/year [NPS unpublished data 2005-2007]) would have no more than minor adverse impacts on this healthy bear population. Actions resulting from this alternative would contribute negligibly to the cumulative impacts of overall grizzly bear harvest.

Conclusion:

There would be minor adverse impacts to wildlife from the harvest of fish and an indirect impact from a slight increase in hunting and trapping at the site as well as the possibility of grizzly bear mortality.

The impact to fish and wildlife resources would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Wilderness Values / Wild River

Alternative 1 (No Action Alternative)

There would be negligible negative impacts to wilderness character and Wild River values from a temporary tent and fish drying rack near the Noatak River for periods of less than 30 days.

“Untrammeled” – This alternative would not affect the degree to which the components or processes of ecological systems are controlled or manipulated because use of the site would be for less than 30 days and the site would be restored to natural conditions.

“Undeveloped” – The imprint of man’s work, including the reliance on structures and installations, would remain substantially unnoticeable. The applicant would use a tent for up to 30 days and would remove his equipment at the end of his stay. During the period of use, a tent could be noticeable. A tent is a very temporary structure and would be unlikely to affect the undeveloped character of the area.

“Natural” – Natural conditions within the regional landscape would remain largely unaffected.

“Outstanding opportunities for solitude or a primitive and unconfined type of recreation” – A tent and fish drying rack could be visible from the Noatak river, which supports 300-400 recreational users per year. The gravel bar east of the fish camp contains a popular camping site for river floaters. This camping site is within a half mile of the fishing site, so it is possible that recreational users would encounter a tent and fish drying rack during the period of time the applicant would be using the site (less than 30 days). Seeing these things would detract from a sense of solitude. This alternative would have minimal affect on opportunities for visitors to experience solitude or a primitive and unconfined type of recreation because visitors on the

Noatak river may see a tent, which is a reasonable thing to see in wilderness because its impact is temporary and the site would be restored to a natural condition after each period of use.

Cumulative Impacts:

Currently there are eight cabins (three of which are NPS cabins and one of which is the applicant's existing cabin) along the Noatak River from the confluence of the Kelly River upriver to the shared boundary with Gates of the Arctic National Park. The cumulative impact of these cabins plus other signs of modern human use along the Noatak River would have a moderate long term negative effect on wilderness resource values. This alternative would be responsible for a negligible portion of this impact.

Conclusion:

There would be negligible adverse impacts to wilderness character from having a temporary facility set up for periods less than 30 days and having no requirement for proper disposal of human waste.

The impact to wilderness resources would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Alternative 2 (Applicant's Proposed Alternative)

There would be minor long term negative impacts to wilderness character and Wild River values from having a permanent cabin, cache, and fish drying rack near the Noatak River.

“Untrammeled” – This alternative would have a negligible effect on the degree to which the components or processes of ecological systems are controlled or manipulated because ecological processes at the footprint of the cabin and the immediate area would be altered. The site would have permanent structures and could be used year-round. The cabin footprint and surrounding area would be an extremely small area in the context of the 6.7 million acre Preserve.

“Undeveloped” – The imprint of man's work, including the reliance on structures and installations, would be noticeable because the applicant would construct a cabin, fish drying rack, and elevated food cache. These are considered permanent developments.

“Natural” – Natural conditions within the regional landscape would remain largely unaffected.

“Outstanding opportunities for solitude or a primitive and unconfined type of recreation” – A cabin and cache would not be visible from the Noatak River because the permit would stipulate that the cabin and cache be sited far enough into the forest that they would not be seen from the river and that materials and colors blend with the surroundings. The gravel bar east of the fish camp contains a popular camping site for river floaters. This camping site is within a half mile of the fishing site, so recreational users could encounter the cabin year-round. Seeing permanent structures can detract from a sense of solitude.

Cumulative Impacts:

Currently there are eight cabins (three of which are NPS cabins and one of which is the applicant's existing cabin) along the Noatak River from the confluence of the Kelly River upriver to the shared boundary with Gates of the Arctic National Park. The cumulative impact of these cabins plus other signs of modern human use along the Noatak River would have a moderate long term negative effect on wilderness resource values. This alternative would be responsible for a minor portion of these impacts since it would increase the number of cabins in the Preserve along the Noatak River from 8 to 9.

Conclusion:

There would be minor adverse impact to wilderness character from having a permanent cabin, elevated cache, and related facilities sited in designated Wilderness and beside a Wild River.

The impact to wilderness resources would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Alternative 3 (Environmentally Preferred Alternative)

There would be minor long term negative impacts to wilderness character and Wild River values from having a permanent tent platform, cache, and fish drying rack near the Noatak River.

“Untrammeled” – This alternative would have a negligible effect on the degree to which the components or processes of ecological systems are controlled or manipulated because the site would have a tent platform and food cache that would not be removed after periods of use. Ecological processes at the footprint of the tent platform and the immediate area would be altered. This is an extremely small area in the context of the 6.7 million acre Preserve.

“Undeveloped” – The imprint of man's work, including the reliance on structures and installations, would be noticeable because the applicant would construct a tent platform, fish drying rack, and elevated food cache. These are considered permanent developments. It should be noted that a tent platform would have less of an impact on the visual aspects of wilderness character than a cabin since the upper portion of the facility is temporary and the tent fabric would be removed after each period of use. Supporting poles for the canvas may or may not be left in place.

“Natural” – Natural conditions within the regional landscape would remain largely unaffected.

“Outstanding opportunities for solitude or a primitive and unconfined type of recreation” – A tent platform and cache would not be visible from the Noatak River because the permit would stipulate that the platform and cache be sited far enough into the forest that they would not be seen from the river and that materials and colors blend with the surroundings. The gravel bar east of the fish camp contains a popular camping site for river floaters. This camping site is within a half mile of the fishing site, so recreational users could encounter the platform and elevated food cache year-round. Seeing such structures can detract from a sense of solitude. The

tent fabric, however, would be removed after each period of use so the site would feel less permanent and developed than if a cabin were there.

Cumulative Impacts:

Currently there are eight cabins (three of which are NPS cabins and one of which is the applicant's existing cabin) along the Noatak River from the confluence of the Kelly River upriver to the shared boundary with Gates of the Arctic National Park. The cumulative impact of these cabins plus other signs of modern human use along the Noatak River would have a moderate long term negative effect on wilderness resource values. This alternative would be responsible for a minor portion of these impacts since it would increase the number of permanent structures in the Preserve but it would not increase the number of cabins.

Conclusion:

There would be minor adverse impacts to wilderness character from having a permanent tent platform, elevated cache and related facilities sited in designated Wilderness and beside a Wild River.

The impact to wilderness resources would not result in an impairment of park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

Subsistence Use

Alternative 1 (No Action Alternative)

The applicant would use a temporary facility or structure to support his subsistence fishing activities. See also Appendix A, ANILCA § 810 analysis.

Opportunity: Under this alternative, the applicant would have limited and unsatisfactory opportunities for subsistence fishing activities at this site because he would be able to use a temporary structure or facility for less than 30 days. That is not enough time to meet his needs.

Cold, Wet Weather: The applicant would experience minor negative impacts under this alternative because he would be using a temporary structure or facility which would provide limited protection against inclement weather. Use of a temporary facility or structure would be challenging but would not restrict opportunities for subsistence at this site especially since the applicant has been successfully using a tent at this site for more than 20 years.

Bears: The applicant would experience minor to moderate negative impacts under this alternative because a temporary structure or facility would not afford him much protection against bears.

Cumulative Impacts: There are no past, present, or reasonably foreseeable actions that would affect subsistence use at this site.

Conclusion:

There would be a moderate adverse impact to subsistence opportunities because the applicant could only use that site for periods less than 30 days. The applicant would experience minor adverse impacts due to inclement weather and minor to moderate adverse impacts from bears.

Alternative 2 (Applicant's Proposed Alternative)

The applicant would use a plywood cabin to support his subsistence fishing activities. See also Appendix A, ANILCA § 810 analysis.

Opportunity: Under this alternative, the applicant would have ample opportunity for subsistence fishing activities at the proposed site because he would use the site for periods longer than 30 days. The elevated food cache and the requirement for him to be present when fish are drying on the fish rack would make it possible for him to retain more of his harvest because his harvest would be better protected from bears. If he can protect more of his harvest he would be able to share more fish with other people, as is a customary practice. This would provide benefits to the applicant and other local people.

Cold, Wet Weather: The applicant would experience moderate beneficial impacts under this alternative because he would be using a cabin which would provide protection against inclement weather, and flood events.

Bears: The applicant would experience minor beneficial impacts under this alternative because a plywood cabin would afford him greater protection against bears than the other two alternatives; however, plywood would not guarantee the applicant's safety.

Cumulative Impacts: There are no past, present, or reasonably foreseeable actions that would affect subsistence use at this site.

Conclusion:

There would be a long-term moderate beneficial impact to subsistence opportunities because the applicant would have more comfortable conditions in which to work. He could provide for additional people, and other subsistence users could also use the cabin; however, other subsistence users may feel displaced from the site. The applicant would experience moderate beneficial impacts from protection against inclement weather and from improved bear protection.

Alternative 3 (Environmentally Preferred Alternative)

The applicant would use a tent platform to support his subsistence fishing activities. See also Appendix A, ANILCA § 810 analysis.

Opportunity: Under this alternative, the applicant would have ample opportunity for subsistence fishing activities at the proposed site because he would use the site for periods longer than 30 days. The elevated food cache and the requirement for him to be present when fish are drying on the fish rack would make it possible for him to retain more of his harvest because his harvest would be better protected from bears. If he can protect more of his harvest

he would be able to share more fish with other people, as is a customary practice. This would provide benefits to the applicant and other local people.

Cold, Wet Weather: The applicant would experience minor beneficial impacts under this alternative because he would be using a tent platform which would provide some protection against inclement weather. He would be relatively comfortable working out of a tent platform since it would offer some protection in inclement weather and an elevated structure would protect him during flood events.

Bears: The applicant would experience negligible to minor beneficial impacts under this alternative because a tent platform would afford him limited protection against bears (a bear could easily get through tent fabric).

Cumulative Impacts: There are no past, present, or reasonably foreseeable actions that would affect subsistence use at this site.

Conclusion:

There would be a long-term minor beneficial impact to subsistence opportunities because the applicant would have somewhat more comfortable conditions in which to work. Other subsistence users could also use the facility; however, some subsistence users may feel displaced from the site. The applicant would experience minor beneficial impacts from protection against inclement weather.

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APPENDIX A

ANILCA Section 810(a) Summary of Evaluations and Findings

I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810(a) of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluations of potential restrictions to ANILCA Title VIII subsistence uses which could result from the National Park Service (NPS) authorizing the construction of a subsistence cabin near the confluence of the Noatak and Kuguroruk Rivers within Noatak National Preserve (NOAT).

II. THE EVALUATION PROCESS

Section 810(a) of ANILCA states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands . . . the head of the federal agency . . . over such lands . . . shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be affected until the head of such Federal agency:

- (1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to Section 805;
- (2) gives notice of, and holds, a hearing in the vicinity of the area involved; and
- (3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

ANILCA created new units and additions to existing units of the national park system in Alaska. Noatak National Preserve was created by ANILCA Section 201 (8)(a) for the purposes of : "to maintain the environmental integrity of the Noatak River and adjacent uplands within the preserve in such a manner as to assure the continuation of geological and biological processes unimpaired by adverse human activity; to protect habitat for, and populations of , fish and wildlife, including , but not limited to caribou, grizzly bears, Dall sheep, moose, wolves, and for waterfowl, raptors, and other species of birds; to protect archeological

resources; and in a manner consistent with the foregoing, to provide opportunities for scientific research. The Secretary may establish a board consisting of scientists and other experts in the field of arctic research in order to assist him in the encouragement and administration of research efforts within the preserve.”

Subsistence uses by local rural residents are allowed in NOAT in accordance with the provisions of ANILCA and NPS regulations. Subsistence activities are the customary and traditional use by rural Alaska residents of wild, renewable resources for direct personal or family consumption such as food, shelter, fuel, clothing, tools or transportation; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption; for barter or sharing for personal or family consumption; and for customary trade.

A portion of NOAT has been designated wilderness and is administered under provisions of the Wilderness Act.

ANILCA designated the Noatak River as a Wild River from its source in the Gates of the Arctic National Park to its confluence with the Kelly River.

ANILCA Section 1316 provides for the authorization of new cabins and other temporary structures related to the taking of fish and wildlife. ANILCA directs that such facilities must be constructed of materials that blend in with and are compatible with the immediate surrounding landscape. Permits are required for the construction and use of these sites. At the end of the specified period of occupancy structures or facilities must be removed from the area by the permittee.

The NPS has incorporated subsistence cabin use regulations into Title 36 Code of Federal Regulations (CFR) Sections 13.160 to 13.168.

The Superintendent may permit the construction of a new cabin for subsistence purposes only if a tent or other temporary facility would not adequately and reasonably accommodate the applicant's subsistence uses without significant hardship and if not other type of cabin or structure would adequately and reasonably accommodate the applicant's subsistence uses. The decision is based on impacts on the values and purposes for which the preserve was established. The superintendent must provide for shared use of new cabins by other local rural subsistence users as well as the permittee.

“In any permit authorizing the construction of a cabin or other structure necessary to reasonably accommodate the authorized subsistence uses, the Superintendent shall provide for shared use of the facility by the permittee and other local rural residents rather than for exclusive use by the permittee.” Title 36 CFR Section 13.168

The potential for significant restriction must be evaluated for the proposed action's effect upon "... subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use."

III. PROPOSED ACTION ON FEDERAL LANDS

Noatak National Preserve (NOAT) is considering a permit application for constructing one 12' by 16' cabin for subsistence activities within NOAT. The permit applicant, a NPS qualified subsistence user, plans to use the cabin to support Title VIII subsistence fishing activities. The requested cabin would be located on an island near the confluence of the Noatak and Kuguroruk Rivers. The cabin site is located above mean high water mark. The channel behind the island carries water when the river is in flood but is typically dry. The island is covered with willow, alder, and spruce.

The applicant identified the following reasons for needing a cabin at the fishing site:

- The river current at his existing cabin, which is located on private land, is too fast for using a net so he's been using a fish camp 2.6 miles downstream from his cabin. He is now requesting a cabin to support his subsistence gill net fishing activities.
- Bears are destroying his harvest at the fish camp. A cabin would afford him personal protection and would allow him to better protect his harvest.
- It is challenging to camp and work in cold rain and wet snow. A cabin would provide more comfortable living and working conditions.
- Slime on the rocks makes it difficult to travel back and forth between his cabin (located on private land) and the fish camp. A cabin at the fish camp would allow him to more comfortably remain at his fishing location during the fishing seasons.

Alternative 1: No Action Alternative

No cabin/tent platform construction permit would be issued. Pursuant to 36 CFR 13.166 the applicant would use a temporary facility or structure for less than thirty days and the site would be returned to a natural condition.

Alternative 2: Authorize Permit to Construct New Cabin for Subsistence Purposes (Applicant's Proposed Alternative)

The applicant would be issued a permit to construct a cabin and accompanying food cache on the island near the confluence of the Noatak and Kuguroruk Rivers (S20, T20N, R14W, 1:63,360 Baird Mountains D-6) (figures 1 & 2).

The permit would authorize one 12' x 16' cabin, situated three feet off the ground, out of view of the river, and at least 50 feet from the mean high water line. It would be constructed of plywood and a tin roof. The permit would authorize an Alaska-style food cache elevated approximately 12 feet off the ground (figure 3). The permit would also authorize a fish drying rack. Cabin, cache, and drying rack materials would be brought to the site via the Noatak River. They would remain at the site year-round. Construction could begin immediately. The

applicant would plan to use the cabin for a short period in the spring and for about two months in the fall.

The cabin would be designated for shared use among subsistence users as required by 36 CFR 13.168; and would be available to other subsistence users throughout the year. Residential use would be prohibited under 36 CFR 13.164(b). Proposed permit stipulations are listed in Appendix B.

Alternative 3: Authorize Permit to Construct Tent Platform for Subsistence Purposes (Environmentally Preferred Alternative)

The applicant would be issued a permit to construct a tent platform and accompanying food cache on the island near the confluence of the Noatak and Kuguroruk Rivers (S20, T20N, R14W, 1:63,360 Baird Mountains D-6) (figures 1 & 2). Pursuant to 36 CFR 13.104, a tent platform is defined as a structure, usually made of timber products, constructed to provide a solid, level floor for a tent, with or without partial walls not exceeding three feet in height above the floor and having only the tent fabric, the ridge pole and its support poles extending higher than three feet above the floor. The permit would authorize a tent platform situated out of view of the river and at least 50 feet from the mean high water line.

The permit would also authorize an Alaska-style food cache elevated approximately 12 feet off the ground (figure 3), and a fish drying rack. Tent platform, cache, and drying rack materials would be brought to the site via the Noatak River. The footprint of the tent platform would be the same as for the cabin in Alternative 2. The tent fabric would be removed when not used, but the platform, accompanying poles, cache, and fish drying rack would remain year-round. Construction could begin immediately. The applicant would likely use the tent platform for a short period in the spring and for about two months in the fall.

The tent platform would be designated for shared use among subsistence users as required by 36 CFR 13.168, and would be available to other subsistence users throughout the year. Residential use would be prohibited under 36 CFR 13.164(b). Proposed permit stipulations are listed in Appendix B.

IV. AFFECTED ENVIRONMENT

This section summarizes the affected environment as it pertains to subsistence resources and uses. As one of North America's largest mountain-ringed river basins, the Noatak River supports an intact, unaltered ecosystem. The Noatak River is a National Wild River and most of the drainage is included in NOAT. The extreme upper headwaters of the Noatak River are located in Gates of the Arctic National Park.

NOAT combines two climatic themes. Near the coast a maritime climate prevails, while the interior experiences a continental climate with more extreme variations in temperatures and precipitation. Temperatures average -30 to 15 during the winter and 40 to 70 during the summer. Temperature extremes have been recorded from -59 to 75. Snowfall averages 48 inches, with 10 to 13 inches of total precipitation per year.

The Noatak River is navigable by shallow-draft boats from early June to early October. Local residents primarily use motorized boats, snowmachines and aircraft to access public lands, subsistence camps and private inholdings to engage in subsistence activities such as hunting, fishing, trapping, and gathering berries, wild plants and wood.

The terrain along much of the Noatak River is vast and open arctic tundra. The lower Noatak drainage contains a boreal forest cover. At higher elevations, an alpine tundra community can be found, with willow, heather and combinations of grasses, sedges, wildflowers and mosses. Moist tundra community occurs along the foothills of the Noatak Valley. Bog rosemary and cranberry are found in wetter areas as are salmonberry and a variety of mosses. A spruce forest community, consisting of white spruce, paper birch, aspen, poplar and black spruce, occur sporadically along south-facing foothills. In NOAT, the non-commercial harvest of wood and plant materials for appropriate subsistence uses is allowed pursuant to NPS regulations.

Subsistence fishing has long been a customary and traditional activity for local residents within the region. Salmon occur throughout the Noatak drainage system, with Chum being the most abundant, and sockeye, pinks and kings found in the lower reaches of the river. Sheefish inhabit the Kobuk and Selawik Rivers and are considered a preferred subsistence item. Trout are found in the deeper lakes within the preserve, as are burbot and freshwater cod. The Noatak River supports a Kotzebue-based subsistence fishery. Most fishing occurs in late summer and fall. A portion of the Noatak River has been designated a restricted-sensitive salmon use area. Mean annual Chum escapement in the Noatak is about 135,300 fish, although annual variation is significant. Chum salmon begin entering the Noatak River as early as the first week in July; however, the run does not peak until mid-August and continues through September.

Subsistence wildlife resources within the region include seals, caribou, moose, Dall's sheep, grizzly bear, wolf, fox, lynx, marten, beaver, muskrat, and porcupine. A variety of subsistence bird species inhabits the region, particularly during the summer and fall migratory season, when thousands of birds including waterfowl congregate in the Noatak River corridor breeding and nesting areas.

The Noatak River and its web of tributaries and feeder lakes are host to a variety of fish, wildlife, birds, and vegetation that are used for a variety of subsistence purposes. The archeological record indicates that people have been attracted by these resources for well over 10,000 years. These same resources, and others, continue to attract human use and provide support for local social and cultural continuity. Rural residents rely extensively on subsistence activities to meet dietary and cultural needs.

Cabins are sometimes used to support subsistence activities in the region. Currently there are eight cabins along the Noatak River from the confluence of the Kelly River upriver to the shared boundary with Gates of the Arctic National Park. This number includes the applicant's existing cabin. Outside the preserve, there are about 45 cabins along the Noatak River from the confluence of the Kelly River downriver to the ocean (pers. comm. Dan Stevenson). Most cabins are located near Noatak village along the lower Noatak River. A village site near the confluence of the Noatak and Kuguroruk Rivers contained homes made from a frame of logs

covered by moss turf. Smith observed this village site, consisting of house pits and cache pits, in 1905 (pers. comm. Bob Gal, Archeologist, NOAT). The proposed cabin site is a relatively popular fishing location. It is located about 45 miles from Noatak Village. NPS staff have observed people fishing there numerous times.

These documents contain additional descriptions of NOAT's subsistence environment:

Beach Ridge Archeology of Cape Krusenstern: Eskimo and Pre-Eskimo Settlements Around Kotzebue Sound, Alaska. Publications in Archeology 20. National Park Service, Washington, D.C., Giddings, James Louis and Douglas Anderson, 1986.

Final Environmental Impact Statement - Wilderness Recommendation, Cape Krusenstern National Monument, Alaska. National Park Service, on file Kotzebue, Alaska, National Park Service, 1988.

Final Environmental Impact Statement, Wilderness Recommendation. Alaska Planning Group, National Park Service, 1988.

The Noatak River Fall Caribou Hunting and Aircraft Use. Susan Georgette and Hannah Loon, Technical Paper 162, Alaska Department of Fish and Game, 1988.

Subsistence Use Area Mapping in Ten Kotzebue Sound Communities. Robert Schroeder, Technical Paper 130, Alaska Department of Fish and Game, 1987.

Noatak National Preserve, Final General Management Plan, Land Protection Plan. National Park Service, 1985.

V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources which could be impacted.

The evaluation criteria are:

- 1) the potential to reduce important subsistence fish and wildlife populations by (a) reductions in numbers; (b) redistribution of subsistence resources; or (c) habitat losses;
- 2) what affect the action might have on subsistence fisherman or hunter access;
- 3) the potential for the action to increase fisherman or hunter competition for subsistence resources.

1) The potential to reduce populations:

Alternative 1: No Action Alternative

Fish would continue to be harvested at the mouth of the Kuguroruk River. The fish population is large enough that this harvest would not affect any population parameters; populations would continue to be considered natural and healthy.

Bears may be attracted to the smell of fish at the fish camp. During periods less than 30 days, grizzly bears could be shot in defense of life or property. Since there would be no permanent structure at the fish camp, there would be no safe place to store fish once they're dried. Over the last 20 years, the applicant has reported shooting six grizzly bears in defense of life or property at his existing cabin (2.6 miles upstream from the fishing site and proposed cabin location). The number of bears potentially killed as a result of the applicant's activities would have no more than minor adverse impacts to the bear population.

Alternative 2: Authorize Permit to Construct New Cabin for Subsistence Purposes

Fish would continue to be harvested at the mouth of the Kuguroruk River, and over the long term perhaps a greater number of fish would be harvested since the applicant would have more comfortable conditions in which to live and work. The fish population is large enough that a potential increase in harvest would not affect any population parameters; populations would continue to be considered natural and healthy.

Bears may be attracted to fish smells at the cabin, cache, and drying rack. These structures would be present year round, and would be likely to attract bears to the area during periods in spring and fall when they are being used to dry and store fish; however, the permit would require that the applicant use an elevated cache for fish storage to prevent confrontations between people and bears. The permit would also require that the applicant be present when fish are drying on the rack. The applicant's presence may help to deter bears approaching drying fish. Because the cabin would be a shared use facility, there is additional potential for bear-human conflicts and there is also additional potential for human presence to drive bears away. The plywood cabin would provide the applicant and other users with some protection against bears. For these reasons it would seem unlikely that grizzly bears would be killed in defense of life or property.

The cabin might become attractive to others, especially for trapping, spring bear hunting, and occasional winter hunting of caribou. Consequently, there could be a slight increase in harvest of those wildlife resources during winter, spring, or late fall. Activity at the cabin site during caribou migration may cause some caribou to change their migratory river crossing pattern. On balance, there would be a negligible to minor adverse impact to fish and wildlife.

Alternative 3: Authorize Permit to Construct Tent Platform for Subsistence Purposes (Environmentally Preferred Alternative)

Impacts to fish would be identical to those described in Alternative 2.

Bears may be attracted to fish smells at a tent platform, cache, and drying rack. These structures would be likely to attract bears to the area during periods in spring and fall when they are being used to dry and store fish; however, the permit would require that the applicant use an elevated cache for fish storage to prevent confrontations between subsistence users and bears. The permit would also require that the applicant be present when fish are drying on the rack. Because the tent platform would be a shared use facility, there is additional potential for bear-human conflicts and there is also additional potential for human presence to drive bears away. The tent platform may not provide ample protection for the applicant or other subsistence users so it could be expected that an occasional grizzly bear would be killed in defense of life or property.

A temporary facility might be somewhat attractive to others, especially for trapping, spring bear hunting, and occasional winter hunting of caribou. Consequently, there could be a slight increase in harvest of those wildlife resources during winter, spring, or late fall. On balance, there would be negligible adverse impacts to fish and wildlife.

Conclusions: None of the alternatives would reduce important subsistence fish and wildlife populations.

2) Restriction of Access:

Alternative 1: No Action Alternative

Access for ANILCA Title VIII subsistence harvests on NPS lands is granted pursuant to section 811 of ANILCA. Rural residents engaged in subsistence activities are allowed reasonable access to subsistence resources. This alternative would not affect access.

Alternative 2: Authorize Permit to Construct New Cabin for Subsistence Purposes

Same as Alternative 1.

Alternative 3: Authorize Permit to Construct Tent Platform for Subsistence Purposes (Environmentally Preferred Alternative)

Same as Alternative 1.

Conclusions: None of the alternatives described in the EA would restrict access of subsistence users to natural resources in NOAT.

3) Increase in Competition:

Alternative 1: No Action Alternative

Use of the site for periods less than 30 days would not affect competition at this site.

Alternative 2: Authorize Permit to Construct New Cabin for Subsistence Purposes

The proposed cabin site is a relatively popular fishing location. It is located about 45 miles from Noatak Village. NPS staff have observed people fishing there numerous times. Normally subsistence users will not occupy a site regularly used by someone else for subsistence

purposes without some kinship ties or permission. Some subsistence users may feel displaced from the site if the applicant built a cabin there. On the other hand, a cabin would be attractive to others (especially for trapping, spring bear hunting, and occasional winter hunting of caribou) and when the applicant is not there, it may facilitate subsistence activities by other subsistence users.

Alternative 3: Authorize Permit to Construct Temporary Facility for Subsistence Purposes (Environmentally Preferred Alternative)

The proposed cabin site is a relatively popular fishing location. It is located about 45 miles from Noatak Village. NPS staff have observed people fishing there numerous times. Normally subsistence users will not occupy a site regularly used by someone else for subsistence purposes without some kinship ties or permission. Some subsistence users may feel displaced from the site if the applicant built a tent platform there. On the other hand, a tent platform would be attractive to others (especially for trapping, spring bear hunting, and occasional winter hunting of caribou) and when the applicant is not there, it may facilitate subsistence activities by other subsistence users.

Conclusions: None of the alternatives are expected to significantly increase competition for preserve resources.

VI. AVAILABILITY OF OTHER LANDS

No other non-NPS land or private inholdings are available for this use because the proposed cabin site is located where good fishing opportunities exist. The applicant currently has a cabin on his uncle's allotment 2.6 miles upstream but fishing opportunities are not good at that site.

VII. ALTERNATIVES CONSIDERED

A description of alternatives, including alternatives considered but dismissed, is found in the environmental assessment.

VIII. FINDINGS

This analysis concludes that the proposed action would not result in a significant restriction of subsistence uses.

APPENDIX B

Stipulations of the Cabin Construction Special Use Permit

1. The permittee shall exercise this privilege subject to the supervision of the Superintendent, and shall comply with all applicable laws and regulations of the area.
2. Damages - The permittee shall pay the United States for any damage resulting from this use which would not reasonably be inherent in the use which the permittee is authorized to make of the land described in this permit.
3. Benefit - No Member of Congress shall be admitted to any share or part of this permit or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.
4. Assignment - This permit may not be transferred or assigned without the consent of the Superintendent, in writing.
5. Revocation - This permit may be terminated upon breach of any of the conditions herein or at the discretion of the Superintendent.
6. The permittee is prohibited from giving false information; to do so will be considered a breach of conditions and be grounds for revocation [Re: 36 CFR 2.32(a)(4)].
7. This permit is for the construction of a subsistence cabin located near the confluence of the Noatak and Kuguroruk Rivers. It will be located at N67 58.668 W161 55.656.
8. If concealed archeological resources are inadvertently encountered during the construction process, construction must stop and park staff notified.
9. The cabin will be a 12' by 16' uninsulated cabin typical of cabins built in the area to support subsistence activities. The cabin will be situated three feet off the ground and constructed of plywood and a tin roof.
10. The permittee will bring cabin materials to the site via the Noatak River. The permittee is not authorized to harvest timber in NOAT for cabin construction.
11. For the cabin to blend with the landscape, plywood will be stained a darker color and the roof will be black or another natural color.
12. At the end of the fishing season the windows shall be removed or secured by the construction of bear-resistant shutters.

13. The permittee agrees to construct an Alaska-style food cache elevated at least 10 feet off the ground. The cache will be designed to eliminate or significantly decrease confrontations between subsistence users and bears.
14. Upon completion, this cabin is designated a shared use subsistence cabin, which provides for use by the permittee or other qualified local rural subsistence user rather than for exclusive use by the permittee.
15. Nothing contained within this permit shall be construed as limiting public access to any lands, resources or structures within Noatak National Preserve.
16. The permittee recognizes and agrees that he has, or accrues no interest in the structure assigned by this permit nor in the lands upon which the assigned structure rests.
17. Residential use of the cabin is prohibited.
18. Commercial use of the cabin is prohibited.
19. The term of this permit is limited to five years.
20. The permit may be revoked should the permittee be convicted of violation of Federal or State regulations applicable to national parklands.
21. When terminating an activity that involves the cabin, the permittee must dismantle and remove the cabin and all personal property from the park area within a reasonable period of time and in a manner consistent with the protection of the park area.
22. Final cabin or tent platform location will be approved by the NPS.

I have read and agree to comply with the terms and conditions of this permit.

Permittee

Date

The Applicant is hereby on notice of the following existing regulations:

- To meet requirements from the State of Alaska Department of Environmental Conservation and to keep human waste from entering into the Noatak River, the permittee must dispose of human waste at least 100 feet from mean high water and at least 4 feet above the water level at normal high water. The permittee must also have a plan to prevent human waste from entering the Noatak River during floods.
- The permittee agrees to use an Alaska-style food cache elevated at least 10 feet off the ground. The cache will be designed to eliminate or significantly decrease confrontations between subsistence users and bears.
- Fish will not be left unattended or unprotected. The fish rack must be attended while fish are on it, or else fish must be stored in the elevated cache.
- The permittee specifically agrees to maintain the cabin and adjoining lands in a clean and orderly state. The grounds around the structure shall be kept clean and free of garbage, human waste, junk, and discarded animal parts and hides. All residue from garbage that is incinerated must be kept in a secure area and must be removed from the preserve rather than buried. Adequate precautions will be taken around camp to guard against human/bear encounters.
- The cabin is to remain unlocked when the permittee is not there. It is the responsibility of the permittee to remove all personal property when he is not using the cabin; however, the permittee is authorized to have a locked storage area in the cabin for personal property. The permittee agrees to hold the government harmless in the event of damage or loss to said personal property. The National Park Service assumes no responsibility for the loss of any private property, damage or injury associated with the exercise of privileges authorized by this permit.