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National Park Service  
U.S. Department of the Interior

Katmai National Park and Preserve  
Alaska



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# Swikshak Patrol Cabin Replacement Environmental Assessment

February 2010



Comments on this environmental assessment (EA) may be submitted during the 20 day open comment period via the national planning web site at <http://parkplanning.nps.gov>.

For people wishing to submit comments on this EA: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be aware that your entire comment – including your personal identifying information – may be made public. While you can ask us to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. We will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of officials of organizations or businesses, available for public inspection in their entirety. Comments may also be submitted by letter, email, or fax to the contact below.

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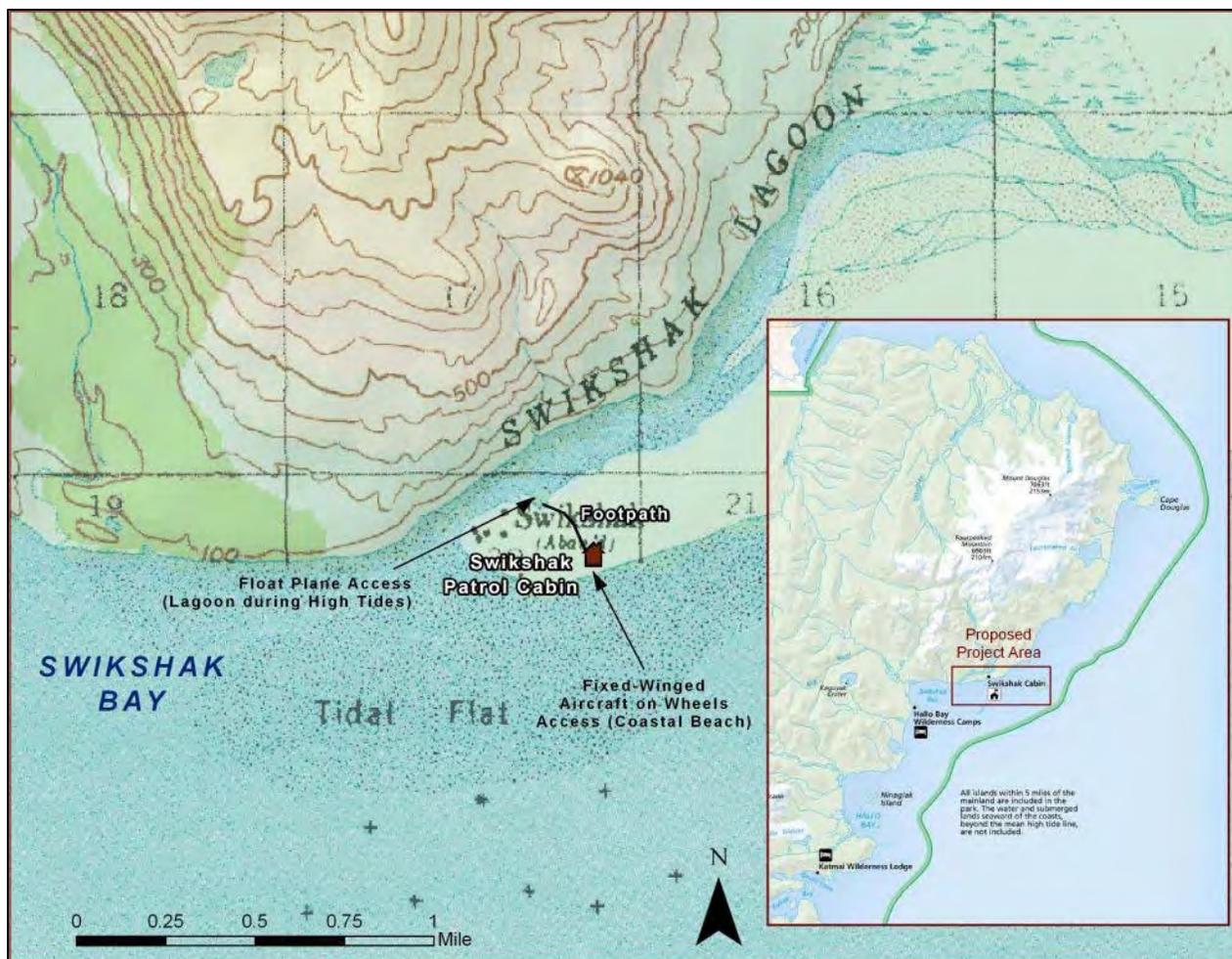
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## TABLE OF CONTENTS

1.	PURPOSE AND NEED	4
1.1	Legal Context	
1.2	Issues	
1.2.1	Issues Selected	
1.2.2	Issues Dismissed	
2.	ALTERNATIVES	7
2.1	Alternative 1, No Action	
2.2	Alternative 2, Replace Cabin (NPS Preferred Alternative)	
2.3	Alternatives Considered but Dismissed	
	Table 1, Summary of Alternatives	10
	Table 2, Summary of Impacts	11
3	AFFECTED ENVIRONMENT	12
4	ENVIRONMENTAL CONSEQUENCES	13
4.1	Alternative 1, No Action	
4.2	Alternative 2, Replace Cabin (NPS Preferred Alternative)	
5	CONSULTATION AND COORDINATION	14
6	REFERENCES	15
APPENDIX	A ANILCA Section 810 Subsistence Analysis	16
	B Wilderness Minimum Requirements Analysis	21
	C NHPA Section 106, Cultural Resources Compliance	28
	D Coastal Zone Management	30
	E Cabin Design Drawings	37

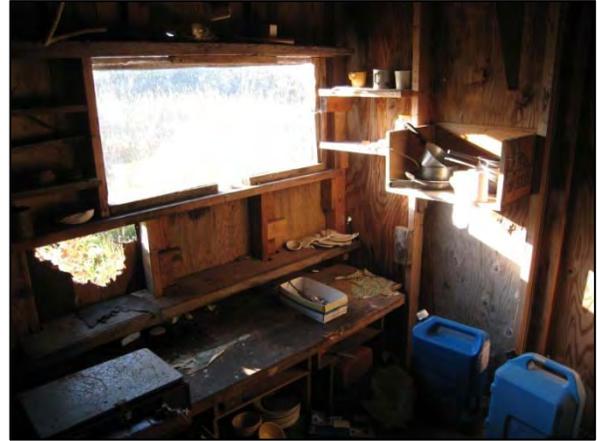




**Figure 2. Swikshak Bay Area of Katmai National Park and Preserve.**

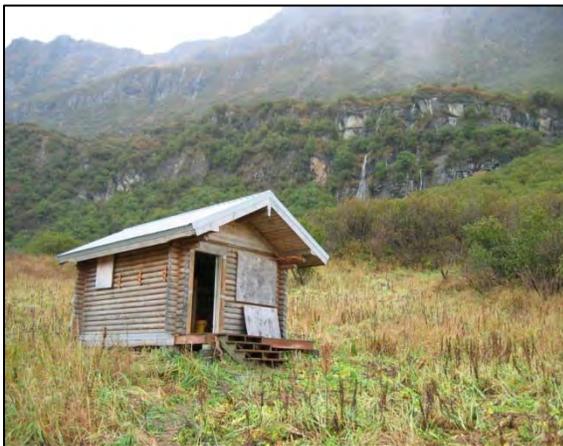
The 10' x 12' wood framed, plywood clad cabin was erected by the Alaska Department of Fish & Game (ADF&G) in 1971 for use as a razor clam research facility (see front cover). The cabin originally contained two bunks, shelving, a wood stove, and a food storage barrel. Adjacent to the cabin was a 12' x 7.5' sauna and an outhouse (both structures have since collapsed and are no longer in use). The cabin served as an ADF&G research facility until 1975 (Tobey 2005). Beginning as early as 1983, the NPS began using the patrol cabin as a shelter for backcountry patrols (Norris 1996). Over the last 25 years, the cabin has continued to provide NPS staff a base camp while conducting coastal patrols along the northern half of the Katmai coast between Cape Douglas and Halo Bay during the summer months when commercially guided sport fishing and bear viewing activities are at their highest levels. During this time period, the cabin has steadily deteriorated due to a combination of the types of building materials used to construct the cabin (plywood with tar paper roofing), harsh coastal weather conditions, and occasional damage caused by brown bears and other wildlife. Examples of this deterioration include a leaking roof, wood rot on the ceiling and floor, gaps and holes on the wall, and intermittently working oil heater and propane cooking stove (Figures 3a and 3b). Due to this deterioration, the NPS determined that the cabin was no longer safe to occupy. Backcountry rangers continue to use the area adjacent to the

cabin as a base camp by setting up tents and a temporary electric perimeter fence for bear protection.



**Figures 3a and 3b. Swikshak Cabin Interior**

In addition to the Swikshak patrol cabin, the NPS has one other administrative use cabin along the Katmai coast. This cabin is located within Amalik Bay, approximately 45 air miles southwest of Swikshak Bay (Figure 4). This cabin provides NPS backcountry rangers the ability to patrol the southern half of the Katmai coast from Kukak Bay to Katmai Bay (Figure 1). Due to the extensive length and complex terrain of the Katmai coast (approximately 200 to 500 miles) and an increase in the number of visitors over the last several years (from approximately 5,600 visitor use days in 2006 to approximately 6,000 visitor use days in 2008) (NPS 2009), the geographic location of the Swikshak patrol cabin is critical in the administration and management of the northern coastal areas of the national park and Wilderness area.



**Figure 4. Amalik Bay Patrol Cabin**

A new replacement cabin is needed to (1) enable the NPS to protect and manage the extensive Katmai coast during the summer months when visitation is at its highest levels, and (2) provide park staff a safe and durable hard-sided shelter for protection against inclement weather and occasional undesirable wildlife encounters.

### **1.1 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 USC 1)

Katmai National Park and Preserve was created in 1980 under the Alaska National Interest Lands Conservation Act (ANILCA) (Public Law 96-487). Section 202(2) of ANILCA states the park and preserve:

...shall be managed for the following purposes, among others: To protect habitats for, and populations of, fish and wildlife including, but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain unimpaired the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features.

Section 701(4) of ANILCA designated approximately 3.5 million acres of Katmai National Park and Preserve as Wilderness. Section 707 of ANILCA provides guidance for the administration of the Katmai Wilderness in accordance with applicable provisions of the Wilderness Act. 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.

## **1.2 Issues**

### **1.2.1 Issues Selected**

- Air Quality.
- Vegetation & Soils.
- Wildlife.
- Soundscape.
- Wilderness.
- Park Management.

### **1.2.2 Issues Dismissed**

- Water Quality. – Neither of the alternatives would significantly affect water quality in the area. Alaska Department of Environmental Quality standards would be followed for pit privy. The outhouse would be more than 100' from water, and the bottom of the earthen privy hole would be more than 4' above the groundwater table.
- Cultural Resources. – The existing Swikshak Patrol Cabin has been evaluated through a Determination of Eligibility and was found to be not eligible for the National Register of Historic Places. An archeological inventory determined that no historic properties were present in the area of potential effect.
- Wetlands, Floodplains, and Riparian Areas. – The cabin site is not in a wetland, floodplain or riparian area.
- Visitor Use. – The Swikshak Patrol Cabin is for NPS administrative use and is not open for public use except in emergencies.

- Environmental Justice. – Neither of the alternatives would significantly affect a minority or disadvantaged population.
- Socioeconomics. – Funding for the project is from the American Recovery and Reinvestment Act of 2009. There would be a beneficial effect to economy from potential hiring of staff; contracting transportation for materials, supplies or staff; and direct purchase of supplies or equipment. Neither of the alternatives would have a significant negative effect on local or regional economy.

This environmental assessment (EA) analyzes the potential environmental impacts which could result from the alternatives considered, including the No Action alternative. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, regulations of the Council of Environmental Quality (CEQ) (40 Code of Federal Regulations 1500 *et seq.*), and the NPS NEPA compliance guidance handbook (Director’s Order (DO)-12, *Conservation Planning, Environmental Impact Analysis, and Decision Making*) (NPS, 2001a).

## **2. ALTERNATIVES**

### **2.1 Alternative 1, No Action**

Under the No Action alternative the Swikshak patrol cabin would not be rebuilt. The NPS would take no action to stabilize the structure. The cabin would continue to naturally decay and collapse. Ranger patrols and other NPS administrative use would continue to camp at the site in tents with a temporary electric fence or use the site only during the day.

The No Action alternative is the Environmentally Preferred Alternative because the Swikshak Bay area would have no functioning administrative facilities. As the existing cabin ruins decay, the area would return to a more natural condition.

### **2.2 Alternative 2, Replace Cabin (NPS Preferred Alternative)**

#### Summary

The existing Swikshak patrol cabin would be demolished and a new cabin would be built at the same site. A new outhouse would also be constructed. The cabin would serve as a NPS administrative facility and would not be used for subsistence, commercial, or public use purposes. If needed, the cabin could be used by visitors as an emergency shelter.

#### Transportation and Staging

Approximately four laborers would be brought to the site by float plane (Swikshak Lagoon), fixed winged aircraft on wheels (sandy coastal beach on south side of the peninsula), or boat (coast or lagoon). A cabin kit and other building materials would be brought to the site from Kodiak, Alaska on a landing craft vessel. It would take two trips to bring the cabin kit over to Swikshak. Staging of materials and staff camp tents would be near the cabin site. Camping would be done using *Leave No Trace* principles. Once ashore, all transportation of materials and people to the cabin site would be on foot, and no motor vehicles would be used within the Katmai Wilderness.

### Demolition and Removal of Existing Structures

The existing 10' x 12' cabin (120 sq ft) would be demolished with hand tools. Cabin materials and the remnants of the former 12' x 7.5' sauna (90 sq ft) and 3' x 3' outhouse (9 sq ft) would be consolidated and sorted. Non-treated and non-painted clean wood and other combustible materials would be burned below the mean high tide line. Materials that are not combustible or that are hazardous to burn would be transported to Kodiak by boat for proper disposal.

### Cabin Construction

A new 20' x 12' kit-built log cabin (240 sq ft) would be constructed on the same location as the existing cabin during the summer of 2010. The footprint of the new cabin (240 sq ft) would be twice the size as the existing cabin (120 sq ft). However, with the removal of the sauna ruins (90 sq ft), the overall increase of the development footprint would be 30 sq ft or 15%. The new cabin would be of identical design and size as the Amalik Bay patrol cabin (Figure 4).

A 5 horsepower gasoline-powered generator would provide temporary electricity to power saws and other similar tools during cabin construction. Use of the generator would be limited to the minimum amount of time needed to complete cabin and outhouse construction. It would be removed after construction. See the Wilderness Minimum Requirements Analysis in Appendix B for additional information.

The interior of the cabin would be designed and constructed to accommodate two people for extended occupation. The cabin would be elevated above the ground between approximately 18" and 24" on pilings, allowing for the temporary storage of boats, kayaks, and other large items.

Anti-reflective photo-voltaic solar panels would be installed on the cabin roof to power a small low-wattage battery system. The power would be used for light bulbs and to charge NPS radios and other portable equipment. A radio antenna would be installed and extend between 6' and 8' above the roof. A ladder and small platform would be installed on the rear of the cabin to enable park staff to set up and remove the solar panel(s) and radio antenna, when needed.

Since the nearest freshwater source is located approximately 1/2 mile north of the cabin on the north shore of Swikshak Lagoon, a 50 gallon rainwater cistern would be installed under or immediately adjacent to the cabin. Rainwater would be collected from the roof (approximately 400 sq ft of surface area) and channeled to the cistern through a system of gutters and pipes. A hand operated pump would provide water to a kitchen sink.

A burner propane stove and oven would be installed in the cabin for cooking. A propane tank shelter box would be constructed on the exterior of the cabin to protect gas lines and prevent wildlife damage. The cabin would be equipped with a battery powered smoke detector and fire extinguisher. A steel storage box would be installed immediately adjacent to the cabin for fuel and boat motor storage.

### Outhouse Construction

A new 3' x 3' outhouse would be constructed over a hand-dug hole in native soil (identical size as existing outhouse). The new outhouse would be made of wood and appropriately styled (design,

finish, roofing, and color) to blend in with the Katmai Wilderness setting. Motorized equipment would not be used to excavate the hole. To comply with State water quality regulations, the bottom of the hole would be at least 4 feet above the water table, and the outhouse would be at least 100 yards from the nearest open water. The existing outhouse hole would be hand filled with native soil from the adjacent new privy pit excavation.

### Vegetation Removal

Trees and brush may need to be removed to provide for a hazard fuel reduction buffer around the new cabin, outhouse, water cistern tank, fuel storage box, and propane tank shelter. This fire safety buffer would be a maximum of 50 feet from all structures. Any trees and brush removed would be cut flush with the ground surface and the slash scattered through the local area. Tree or brush cutting would not occur between April 10 and July 15 in order to protect nesting migratory birds and to comply with the Migratory Bird Treaty Act (16 USC 703).

### Cabin Use

The cabin would likely be used for NPS ranger patrols up to 3 weeks in duration during the salmon run season, and for 1 to 2 weeks during summer months by scientists or other NPS staff. The cabin would not be a subsistence use cabin or a public use cabin. The cabin could be used by visitors during an emergency. The outhouse would be available for visitors to use.

## **2.3 Alternatives Considered but Dismissed**

The NPS studied the possibility of removing the existing Swikshak Patrol Cabin and constructing a new cabin in another location within the Katmai Wilderness on the northern coastal area of park. Each of the four alternatives was dismissed for the reasons described below and is illustrated with its corresponding reference letter in Figure 5.

- A. East Side of Swikshak Peninsula — this location would be accessible by float planes (lagoon) and fixed winged aircraft on floats (coastal beach) when tide levels are sufficient, and by boat. However, this location would be closer to brown bear habitat (salt marshes).
- B. South Side of Swikshak Lagoon — although this location would be accessible by float plane when tide levels are sufficient and by boat, the cabin would be further away from coastal beach access (fixed winged aircraft on wheels) on the south side of the peninsula. In addition, this location would be closer to a concentrated food source for bears (tidal flats containing clams).
- C. North Side of Swikshak Lagoon — although this location would be immediately adjacent to a known freshwater source, it would only be accessible by float planes or boats when tide levels are sufficient (lagoon). Due to the steeper terrain (as illustrated in the topographic relief in Figure 5), accessing the location from the lagoon, transporting materials, and constructing the cabin would be difficult.
- D. Big River — This location would have a dependable supply of freshwater and would be accessible by float planes, fixed winged aircraft on wheels, and boats when tide levels are sufficient. However, this location would be in the middle of a concentrated brown bear population and associated habitat. In addition, the cabin would be located either within or immediately adjacent to an active floodplain (Big River).

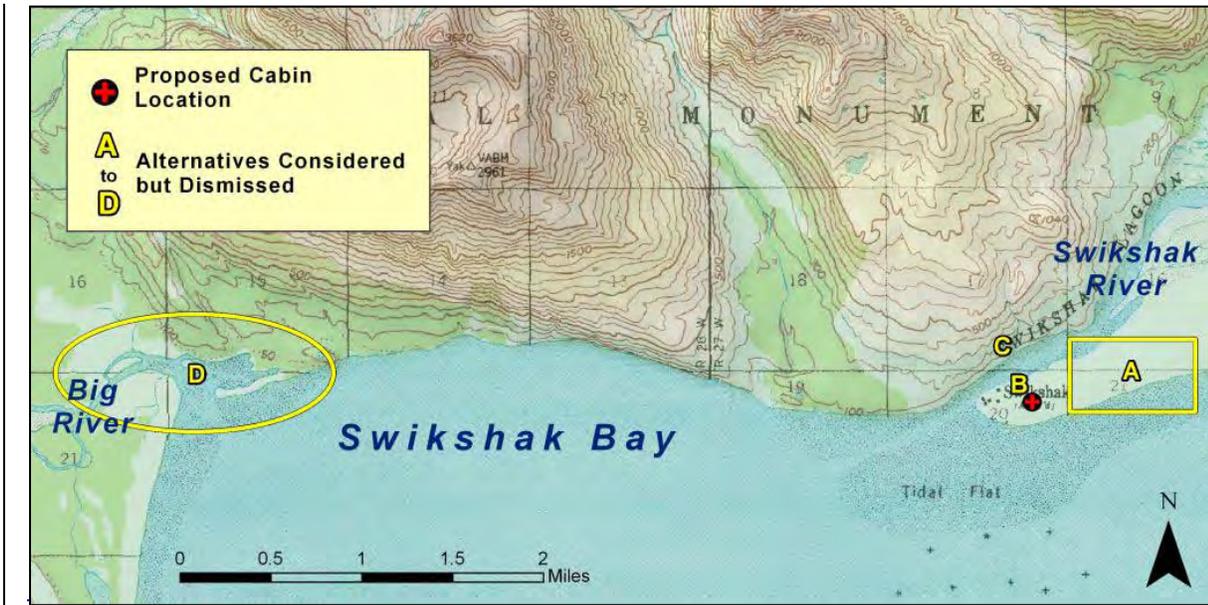


Figure 5. Alternatives Considered but Dismissed

Table 1 – Summary of Alternatives

	Alternative 1 — No Action	Alternative 2 — Replace Cabin (NPS Preferred Alternative)
Cost	\$0	\$70,000 - 75,000 (American Recovery and Reinvestment Act funds)
Schedule	None	2 - 3 week construction period during the summer of 2010
Description	Continue the existing use and management of the cabin site. Since the cabin is no longer usable, patrol rangers and other employees would stay in a tent camp. Electrified perimeter fencing would be set up for bear safety. Human waste would be deposited in small shallow holes using <i>Leave No Trace</i> principles. The cabin would be left in place and allowed to deteriorate. The outhouse and sauna ruins would also remain in place.	The existing cabin, outhouse ruins, and sauna ruins would be removed. A cabin kit and other materials would be transported by boat from Kodiak, Alaska. Non-reflective photo-voltaic panels would be installed on the cabin roof. A propane cooking stove would be installed. The new cabin would be constructed in same location as the previous cabin. A new pit privy outhouse would be constructed in close proximity to the previous outhouse.

**Table 2 – Summary of Impacts**

	Alt 1 – No Action	Alt 2 – Replace Cabin (NPS Preferred Alternative)
<b>Air Quality</b>	The routine use of aircraft and motorboats to transport NPS staff to and from the patrol area would have a negative minor long-term effect on air quality. Cumulative negative effects on air quality would continue along the Katmai coast as visitation to the area increases in the future.	The open burning of approximately 5 cubic yards of burnable materials and project debris, and the transport of materials and laborers to and from the project area using aircraft and motorboats would have a negative minor short-term impact on air quality. The routine use of aircraft and motorboats to transport NPS staff to and from the patrol area would have a negative minor long-term effect on air quality.
<b>Vegetation &amp; Soil</b>	Negative minor long-term impact from use of approximately 1 acre of land for NPS administrative activities while tent camping. Additional impacts outside of the 1 acre area would occur from depositing human waste in shallow holes.	Negative minor long-term impact from use of approximately 1 acre of land for NPS administrative activities. Occasional vegetation clearing would occur around cabin to maintain a fire safe perimeter. Human waste would be concentrated at the pit privy. Extended stays within the cabin would greatly reduce the trampling impact of camping.
<b>Wildlife</b>	Negative minor short-term impact on wildlife populations from presence of NPS staff in the area during the summer months, especially from the use of electrified perimeter fencing during overnight stays. Negative minor long-term impact on wildlife habitat from use of approximately 2 acres of land for NPS administrative activities while tent camping.	Negative minor short-term impact on wildlife populations from presence of NPS staff in the area during the summer months. Negative minor long-term impact on wildlife habitat from use of less than 1 acre of land for NPS administrative activities at the cabin. Overnight stays would occur within a hard-sided structure (cabin) and would eliminate the need of electrified perimeter fencing.
<b>Soundscape</b>	Moderate short-term, long-term, and cumulative impacts to soundscape during the continued use of aircraft and boats within the Swikshak Bay area. Small floatplanes (for NPS administrative use, visitor use, and commercial aircraft under Commercial Use Authorizations) would continue to land in the Swikshak River lagoon in summer at high tide for fishing, camping, bear viewing, etc. Small wheel equipped airplanes would continue to land on the Swikshak peninsula beach below the mean high tide line.	Impacts from aircraft frequenting the area would be similar to those in the No Action alternative. Noise from cabin construction would be minor and short-term. Noise from cabin occupancy and NPS operations at the cabin would be minor and short-term.
<b>Wilderness</b>	Negative minor long-term impact to Wilderness character from presence of existing dilapidated cabin, outhouse ruins, and sauna ruins. This impact would lessen as the structures deteriorate and blend in with the Wilderness setting.	Negative moderate long-term impact from presence of a well maintained cabin and outhouse. Negative minor short-term impact from use of motorized equipment during project construction activities.
<b>Park Management</b>	Minor negative impact to the long-term management of the Katmai coast. NPS staff would utilize tent camps with temporary electric fencing for bear protection. The likelihood of extended overnight stays would greatly decrease. Human waste would be deposited throughout the area. Emergency shelter would not be available when needed.	Moderate beneficial impact to the long-term management of the Katmai coast. NPS staff would be able to utilize a dependable and safe hard-sided structure for extended overnight stays. An alternative energy source (solar) would be available when needed. The outhouse would concentrate human waste in one area. Emergency shelter would be available when needed.

### 3. AFFECTED ENVIRONMENT

The existing Swikshak patrol cabin is located within the Katmai Wilderness on a relatively flat and lightly wooded peninsula between Swikshak Bay and Swikshak River's terminal lagoon. Swikshak Bay is on the mainland side of the Shelikof Strait, across from Kodiak Island in southern Alaska. The Swikshak River is a short river about 10 miles in length coming off glaciers around 5 to 6 miles inland and is known for great salmon runs. The cabin is on terrain remaining from Pleistocene glacial advances and Holocene (recent) glacial retreat. The site is well drained, on glacial alluvial sand and gravel deposits. It is about 20 feet above sea level and about 10 miles south of the 6,903 foot Fourpeaked Mountain.

The cabin site is relatively open with willow, alder, and edible berries scattered throughout the area (Figure 6). A thick mat of spongy heath tundra makes up the ground cover. The area likely supports red squirrels, voles, lemmings, jays, ravens, eagles, chickadees, foxes, wolves, brown bear, and moose.

The Swikshak Lagoon area was previously inhabited by Alaska Natives as well as by Russian and American fur traders. As populations of seals and other sea mammals drastically declined in the early 20<sup>th</sup> century, the clamming industry quickly replaced the fur trade (Norris 1996). Historic evidence of one these significant commercial razor clamming facilities is located at the head of Swikshak peninsula approximately ¼ mile west of the cabin area.



**Figure 6. Native Vegetation and Surrounding Landscape of the Swikshak Area.**

## 4. ENVIRONMENTAL CONSEQUENCES

### 4.1 Alternative 1, No Action:

Under the No Action alternative, negative minor long-term impacts on air quality, wildlife, soundscape, and wilderness would continue from the use of aircraft and boats to access the Katmai coast. Negative minor impacts to soils and vegetation would continue as NPS staff utilizes backcountry camping methods (soft-sided tents surrounded by electrified perimeter fences) within a one acre area. Negative moderate long-term impacts on water quality would continue from human waste being deposited in shallow holes within an approximate 2 acre area around the Swikshak cabin area. These impacts would also be cumulative as visitation to the Katmai coast increases in the future.

The Alaska State Historic Preservation Office (SHPO) has concurred with the NPS' determination that the existing Swikshak cabin is not eligible for the National Register of Historic Places (Appendix C). The continued use of the area for NPS administrative purposes would not impact the remains of the razor clamming facility to the west of the cabin area.

### 4.2 Alternative 2, Reconstruct Cabin (NPS Preferred Alternative)

Air Quality: The open burning of approximately 5 cubic yards of burnable materials and project debris, the transport of materials and laborers to and from the project area using aircraft and boats, and the use of a gasoline powered generator for tools during cabin construction would have a negative minor short-term impact on air quality. The routine use of aircraft and boats to transport NPS staff to and from the patrol area would have a negative minor long-term effect on air quality.

Vegetation and Soils: Installing approximately ten support posts for the new cabin, excavating a pit privy (approximately 3' x 3' x 6' in depth), and routinely removing burnable vegetation within 50 feet of the structures would have a negative minor long-term effect on approximately one acre of soils and vegetation within the project area.

Wildlife: The replacement of the existing cabin and construction of pit privy and outhouse within a one acre area may have negative minor short-term impacts when demolition and construction activities occur and negative minor long-term impacts from the presence of the new cabin and outhouse within a one acre area. To minimize negative impacts on nesting migratory birds, no vegetation removal activities would occur between April 10 and July 15.

Soundscape: This alternative would not substantially affect natural soundscape of the area. Small floatplanes (for NPS administrative use, visitor use, and commercial aircraft under Commercial Use Authorizations) would continue to land in the Swikshak River lagoon in summer at high tide for fishing, camping, bear viewing, etc. Small wheel equipped airplanes would continue to land on the Swikshak peninsula beach below the mean high tide line. Noise from this continued aircraft use of the area would be moderate in summer. Noise from cabin construction would be minor. Noise from cabin occupancy and NPS operations at the cabin would be minor.

Demolition and construction activities would have a negative minor short-term effect on the local soundscape.

Wilderness: There would be long-term negative moderate impact to wilderness character affecting its 4 qualities: undeveloped, untrammeled, naturalness, and opportunity for solitude or unconfined recreation. Motorized equipment necessary during construction would have a short-term minor negative impact to wilderness character. A well maintained patrol cabin would increase the number and duration of NPS staff visits to the Swikshak area, which would affect the opportunity for solitude. The cabin would support the scientific and recreational purposes of the Katmai Wilderness by providing shelter for staff involved with scientific inventory, monitoring, or research activities and for recreational visitors during an emergency. A new outhouse would be available for visitors, having a long-term minor beneficial impact to wilderness recreation.

Park Management: There would be a positive long-term impact to park management with the cabin replacement. The central coast of Katmai would receive increased staff attention and protection. Staff and visitor safety would increase.

Cumulative Effects: There would be minor cumulative impacts to the resources of the Swikshak area as visitation along the Katmai coast continues to increase in the future. Cumulative NPS administrative use of the new Swikshak cabin is projected to be less than 30 nights of occupancy per year.

Conclusion: Alternative 2, Reconstruct Cabin (NPS Preferred Alternative), would have a negligible to moderate long-term negative effect on park resources. The level of impact to natural resources from Alternative 2 would not result in impairment of park resources that fulfill specific purposes identified in the park's enabling legislation or that are essential to the natural and cultural integrity of the park.

## **5. CONSULTATION AND COORDINATION**

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## 6. REFERENCES

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**APPENDIX A**  
**ANILCA 810(a)**  
**SUMMARY EVALUATION AND FINDINGS**

**I. INTRODUCTION**

This section was prepared to comply with Title VIII, Section 810 of the ANILCA. It summarizes the evaluation of potential restrictions to subsistence uses that could result from the proposed action by the National Park Service (NPS) to replace the Swikshak patrol cabin within Katmai National Park. An environmental assessment was prepared to describe and analyze a No Action and one action alternative.

**II. 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 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...and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.”

A proclamation by President Woodrow Wilson in 1918 created Katmai National Monument from a reservation of approximately 1,700 square miles. Three major purposes of the monument designation were 1) to preserve an area important to the study of volcanism, 2) to preserve the Valley of Ten Thousand Smokes, and 3) to conserve an area potentially popular with persons seeking unique scenery and for those with scientific interest. The monument was increased by Presidential Proclamation in 1931 to include Brooks Lake, Grosvenor Lake, Lake Coville and part of Naknek Lake; in 1942 to include offshore islands within five miles of the monument coastline; in 1969 to include the remainder of Naknek Lake; and in 1978 to include Kukaklek Lake, Nonvianuk Lake, Kulik Lake, Battle Lake, Hammersley Lake, American Creek, Moraine Creek, Funnel Creek, Strike Creek, Kamishak River, and Douglas River.

With the passage of the ANILCA in 1980 the designation of approximately 3.7 million acres of the monument was designated as a national park, and approximately 308,000 acres was designated as a national preserve. Furthermore, 3.4 million acres of the park and preserve were designated as wilderness. The Katmai Preserve was created by the ANILCA Section 202(2) for the following purposes (among others) “to protect habitats for, and populations of, fish and wildlife including, but not limited to, high concentrations of brown/grizzly bears and their den areas; to maintain unimpaired the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features.” The

taking of fish and wildlife for subsistence uses is allowed by the ANILCA within Katmai National Preserve pursuant to Section 203, however, subsistence uses are not authorized within Katmai National Park.

### III. PROPOSED ACTION ON FEDERAL PUBLIC LANDS

Under the Proposed Action (EA Alternative 2), the NPS is proposing to replace the existing Swikshak patrol cabin located on the northern coast of Katmai National Park, Alaska (EA Figure 1). The Swikshak area is within congressionally designated wilderness on the coast of Shelikof Strait and is approximately 220 air miles east southeast of Anchorage. The cabin is located on a peninsula east of Swikshak Bay and south of Swikshak Lagoon (EA Figure 2).

The existing 120 square foot plywood constructed cabin would be demolished with hand tools. Cabin materials and the remnants of the former sauna and outhouse would be consolidated for disposal. Non-treated and non-painted clean wood and other combustible materials would be burned. Materials that are not combustible or that are hazardous to burn would be transported to Kodiak by boat for proper disposal.

A new 240 square foot kit-built log cabin would be constructed on the same location as the existing cabin during the summer of 2010. The interior of the cabin would be designed and constructed to accommodate two individuals during extended occupation. The cabin would be elevated above the ground between approximately 18 and 24 inches on pilings to allow for the temporary storage of boats, kayaks, and other large items. Power tools may be needed to properly construct the cabin.

One to two anti-reflective solar panels would be installed on the cabin roof to power small low wattage light bulbs and charge NPS radios and other portable equipment. A radio antenna would be installed near the cabin roofline and extend between 6 and 8 feet above the roof. A ladder and small platform would be installed on the rear of the cabin to enable park staff to install and remove the solar panel(s) and radio antenna, when needed.

Since the nearest freshwater source is located approximately 0.5 mile north of the cabin on the north shore of Swikshak Lagoon, a 50 gallon capacity water cistern would be installed under or immediately adjacent to the cabin. Rainwater would be collected from the roof and channeled to the cistern through a system of gutters and pipes. A hand operated pump would provide water to a small kitchen sink.

A small four burner propane stove and oven would be installed in the cabin for cooking purposes. A propane tank shelter box would be constructed on the exterior of the cabin to protect gas lines and prevent wildlife damage. The cabin would be equipped with a battery powered smoke detector and fire extinguisher. A steel storage box would be installed immediately adjacent to the cabin for fuel and boat motor storage.

A new outhouse would be constructed over a hand dug hole in native soil. The new outhouse would be made of wood and appropriately styled (design, finish, roofing, and color) for the national park wilderness backcountry setting. Motorized equipment would not be used to dig the hole or construct the outhouse. To comply with State water quality regulations, the bottom of the hole would be at least 4 feet above the water table, and the outhouse would be at least 100 yards from the nearest open water. The existing outhouse hole would be hand filled with native soil from the adjacent new privy pit excavation.

Trees and brush may need to be removed to provide for a hazard fuel reduction buffer around the new cabin, outhouse, water cistern tank, fuel storage box, and propane tank shelter. This fire safety buffer would be a maximum of 50 feet from all structures. Any trees and brush removed would be cut flush with

the ground surface and the slash scattered through the local area. Tree cutting would not occur between April 10 and July 15 in order to protect nesting migratory birds and to comply with the Migratory Bird Treaty Act.

#### IV. AFFECTED ENVIRONMENT

The proposed project area is located on an east to west arranged peninsula remaining from Pleistocene glacial advances and Holocene (recent) glacial retreat. The site is well drained on glacial alluvial sand and gravel deposits. The area is about 20 feet above sea level and about 10 miles south of the 6,903 foot Fourpeaked Mountain. The glacier fed Swikshak River separates the peninsula from the mainland and originates near the base of Fourpeaked Mountain. The cabin site is relatively open with willow, alder, and edible berries scattered throughout the area. A thick mat of spongy heath tundra makes up the ground cover. The area likely supports red squirrels, voles, lemmings, jays, ravens, eagles, chickadees, foxes, wolves, brown bear, and moose.

Subsistence uses are not permitted in Katmai National Park in accordance with ANILCA Title II Section 203; Title VIII Section 816(a); and Title XIII Section 1314(c).

Subsistence uses are allowed within Katmai National Preserve in accordance with the ANILCA Title II Section 203 and provisions of Title VIII. Katmai National Preserve, encompassing 308,000 acres, is located on the northern end of the Alaska Peninsula in Unit 9C and contains geologic features, scenery, wildlife and cultural resources of national significance. The ANILCA also authorized subsistence uses on adjacent federal public lands managed by the Bureau of Land Management (BLM) and the US Fish and Wildlife Service (USFWS).

Subsistence uses in Katmai National Preserve include hunting, trapping, fishing, gathering firewood, picking berries and wild plants, and gathering bird eggs. The area is used for subsistence by residents of Kokhanok, Igiugig, Levelock, Naknek and King Salmon to harvest caribou, brown bear, moose, beaver, snowshoe hare, fox, lynx, mink, wolf, wolverine, ptarmigan, waterfowl, salmon, trout, berries, wild edible plants and other wood resources.

Regional subsistence resources uses include seasonal gathering of wild edible plants and berries, hunting, trapping, and fishing. The main subsistence species are moose, caribou, furbearers, and fish. Subsistence fish include Coho salmon, king salmon, sockeye salmon, northern pike, burbot, Dolly Varden, arctic grayling, lake trout, rainbow trout, and whitefish. Beaver, coyote, red fox, gray wolf, wolverine, river otter, weasel, lynx, marten, mink, and muskrat are important furbearer resources. Subsistence birds include rock and willow ptarmigan, grouse, ducks, and geese.

The NPS recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in a given year may vary considerably from previous years because of weather, migration patterns, and natural population cycles.

#### V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on subsistence activities by the proposed project, three evaluation criteria were analyzed relative to current subsistence resources that could be impacted.

The evaluation criteria are:

1. The potential to reduce important subsistence fish and wildlife populations by (a) reductions in abundance; (b) redistribution of subsistence resources; or (c) loss of habitat.
2. Potential impacts the action may have on access for subsistence hunters and fishermen.
3. The potential for the action to increase competition among hunters and fishermen for subsistence resources.

#### 1. The Potential to Reduce Populations:

##### (a) Reduction in Numbers

The proposed project is not expected to reduce wildlife species populations or to impact key subsistence species. The NPS does not anticipate a significant reduction in numbers of subsistence species due to the proposed project.

##### (b) Redistribution of Resources

The proposed action may temporarily redistribute, displace, or stress subsistence wildlife resources while construction activities occur (EA Alternative 2). The minor disturbances to wildlife would be localized within the immediate project area which is less than one acre in size. Impacts from initial land clearing and construction would be relatively short in duration (two to three weeks during the summer, excluding the removal of trees between April 10 and July 15). The transport of labor, equipment, and materials may cause minor disturbances to wildlife inhabiting the coastal areas (beach on the south side of the peninsula or lagoon on the north side of the peninsula) adjacent to the cabin site. The NPS does not anticipate a significant redistribution of subsistence resources as a result of the proposed project.

##### (c) Habitat Loss

The project area provides suitable habitat for a number of wildlife species, including brown bear, moose, red fox, lynx, coyote, gray wolf, snowshoe hare, and grouse. Less than one acre of vegetation would be lost from cabin replacement activities. This habitat loss would occur approximately 50 miles southeast of the Preserve. Federal and State regulations provide for the adequate protection of fish and wildlife populations within Katmai National Preserve. The NPS does not anticipate a significant loss of habitat from the proposed project.

#### 2. Restriction of Access:

The proposed action would not limit or restrict current subsistence use patterns within Katmai National Preserve. The proposed action is not anticipated to significantly restrict access to subsistence resources.

#### 3. Increase in Competition

The proposed action is not anticipated to result in increased competition for fish, wildlife, and other subsistence resources on Federal public lands.

## VI. AVAILABILITY OF OTHER LANDS

The availability of other lands outside of Katmai National Park and Preserve has been considered. The proposed action is consistent with NPS mandates. The proposed action would not affect the availability of

federal land for subsistence use. No major impact on subsistence uses is expected under the proposed action.

## VII. ALTERNATIVES CONSIDERED

One other alternative was considered and analyzed in the EA. Under EA Alternative 1 (No Action), the NPS would not replace the existing dilapidated cabin. The cabin would continue to naturally decay and collapse. Ranger patrols and other NPS administrative use would continue to camp at the site in tents with a temporary electric fence or to use the site only during the day.

## VIII. FINDINGS

This analysis concludes that Alternative 2, Replace Cabin (NPS Proposed Action) would not result in a significant impact on subsistence activities.

**APPENDIX B**  
**WILDERNESS**  
**MINIMUM REQUIREMENTS ANALYSIS**

Swikshak Patrol Cabin Replacement  
Katmai National Park and Preserve

This analysis will determine: 1) if the proposed action is necessary and appropriate in the Wilderness area; and 2) if it is, then what are the appropriate methods that should be used for demolition, construction and operations in the Wilderness area.

**STEP 1: Determine if any administrative action is necessary and appropriate in wilderness.**

Project Description

An NPS patrol cabin is badly deteriorated due to time, weather and animal damage and is not usable. The NPS is proposing to replace the existing cabin and outhouse.

History of the Cabin Purpose and Use

The Swikshak Cabin was built under a NPS Special Use Permit by the Alaska Department of Fish & Game in 1971 for use as a razor clam research facility. In 1980 the State of Alaska discontinued certifying razor clamming beaches. After the ADF&G research at Swikshak ceased, the cabin remained and was occasionally occupied by NPS rangers and other federal workers. The cabin and the nearby sauna ruins have been determined to be not eligible for listing on the National Register of Historic Places.

Need for an NPS patrol cabin

The cabin is proposed for use as an NPS administrative cabin for support of ranger patrols during the summer and to support occasional science research in the area. The adjacent Swikshak River lagoon is used by park visitors for floatplane landing for fishing, bear viewing, day use, and area camping. Visitor use of the area has notably increased (from approximately 5,600 visitor use days in 2006 to approximately 6,000 visitor use days in 2008) (NPS 2009). In addition to the Swikshak patrol cabin, the NPS has one other administrative use cabin along the Katmai coast, located within Amalik Bay, approximately 45 air miles southwest of Swikshak Bay. A new replacement cabin is needed to (1) enable the NPS to protect and manage the extensive Katmai coast during the summer months when visitation is at its highest levels, and (2) provide park staff a safe and durable hard-sided shelter for protection against inclement weather and occasional undesirable wildlife encounters.

**Step 1(A): Valid Existing Rights or Special Provisions of Wilderness Legislation.**

Are there valid existing rights or is there a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws [ANILCA]) that allows consideration of action involving Wilderness Act Section 4(c) uses (motorized equipment, structure, or installation)? No.

### No Valid Existing Rights

The State of Alaska, ADF&G constructed the cabin under an NPS Special Use Permit which they did not renew after 1980. They retain no valid existing rights to the cabin or site.

### No Special Provisions in the Wilderness Act

The cabin site is in a designated Wilderness area, the Katmai Wilderness. The Wilderness area was legislatively created in 1980 by ANILCA, Section 701. ANILCA, Section 707 directs that the Wilderness area shall be administered in accordance with the Wilderness Act, unless specifically provided for elsewhere in ANILCA. The Wilderness Act, Section 4(c) directs that there shall be no motorized equipment, structure or installation within Wilderness areas, unless: 1) allowed by existing private rights, 2) allowed by a special provision of the Wilderness Act, 3) allowed by provisions of later Wilderness legislation, or 4) determined to be the minimum requirement for the administration of the area for the purpose of the Wilderness Act. None of the special provisions in the Wilderness Act, Section 4(d) provide for an exception for a patrol cabin.

### No Special Provisions in ANILCA

ANILCA Section 1303(a) directs ownership and use, not authorization for replacement. The implementing regulations at 36 CFR 13.130 do not authorize the cabin or its replacement.

### **Step 1(B): Describe Requirements of Other Legislation.**

Do other laws require the proposed action? No.

### **Step 1(C): Describe Other Guidance.**

Does taking action conform to and implement relevant standards and guidelines and direction contained in agency policy, unit and wilderness management plans, species recovery plans, tribal government agreements, state and local government and interagency agreements? Yes.

Section 6.3.10.1 of *NPS Management Policies 2006* states administrative facilities, such as patrol cabins, may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park's wilderness management plan or other appropriate planning documents. The EA addresses the purpose of and need for the Swikshak patrol cabin and serves as the appropriate planning document.

### **Step 1(D): Describe Options Outside of Wilderness.**

Can this situation be resolved by an administrative activity outside of wilderness? No.

The entire northern coast of Katmai is in designated Wilderness, so there are no other locations for a ranger patrol cabin in this area. Non-wilderness options are: 1) to conduct ranger patrols on a fly-in or boat-in basis, without normally spending the night, or by occasionally tent camping in Wilderness; 2) to establish an area seasonal ranger patrol residence off shore on a barge, houseboat or other watercraft; or 3) to station the patrol ranger across the Shelikof Strait on Kodiak Island, and travel over 30 miles daily to the Katmai coast patrol area;

**Step 1(E): Wilderness Character.**

Is action necessary to preserve one or more of the qualities of wilderness character including: untrammelled, undeveloped, natural, outstanding opportunities for solitude or a primitive and unconfined type of recreation, or unique components that reflect the character of this wilderness area?

Untrammelled:            Yes:            No: x            Not Applicable:

Explain: The presence of a well maintained patrol cabin and outhouse, and the presence of law enforcement rangers, would impact the untrammelled quality of the Katmai Wilderness.

Undeveloped:            Yes:            No: x            Not Applicable:

Explain: A replaced cabin would result in increased development of the Katmai Wilderness area. This development would be concentrated in less than one acre. The cabin and adjacent structures would be designed and constructed to blend in with the surrounding Wilderness landscape

Natural:            Yes:            No: x            Not Applicable:

Explain: The cabin site and NPS management activities occurring along the northern Katmai coast would impact the natural qualities of the Katmai Wilderness.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation:

Yes:            No: x            Not Applicable:

Explain: A replaced patrol cabin would result in reduced opportunity for solitude due to the presence of the structure and the NPS staff; it would result in reduced primitiveness of a Wilderness experience and no change to unconfined recreation in the Wilderness area.

Other unique components that reflect the character of this wilderness:

Yes:            No: x            Not Applicable:

Explain: One of the purposes of Katmai National Park and the Katmai Wilderness is to protect scenic, geological, cultural, and recreational features. The unique components that make up the Katmai Wilderness include the scenic coast, the coastal brown bear population, and salmon abundant rivers and streams. The Swikshak coastal area of Katmai Wilderness is used in summer by floatplanes landing on the Swikshak River lagoon during high tide for fishing, bear viewing, and general recreation, often as day users.

**Step 1(F): Describe Effects to the Public Purposes of Wilderness**

Is taking administrative action consistent with the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act) of recreation, scenic, scientific, education, conservation, and historical use?

Recreation:            Yes: x            No:            Not Applicable:

Explain: A functional ranger patrol cabin, and a publically available outhouse, would benefit Wilderness recreation in the Swikshak area. The cabin would be for NPS administrative use but may be used in an emergency by the public.

Scenic: Yes: No:  Not Applicable:  
Explain: A replaced cabin would result in reduced quality of Wilderness scenery and a structure in Wilderness.

Scientific: Yes:  No: Not Applicable:  
Explain: The cabin may be used to support long term research and monitoring of natural and cultural resources which will lead to a better scientific understanding of the Wilderness resources.

Education: Yes: No: Not Applicable:   
Explain: The cabin would not be used for education or by educational groups. It would neither benefit nor detract from Wilderness educational purposes.

Conservation: Yes:  No: Not Applicable:  
Explain: The cabin would facilitate ranger patrols and help ensure compliance with fish and game laws and park regulations which contribute to the conservation of the Wilderness area.

Historical use: Yes: No: Not Applicable:   
Explain: The cabin is not eligible for the National Register. Historically the cabin was used by State Fish and Game for commercial clam fishery monitoring, research and certification. The cabin would neither benefit nor detract from Wilderness historical use purposes.

**STEP 1 DECISION: Is any administrative action necessary in Wilderness?**

Yes:  No: More information needed:

Explain: If the cabin is not replaced, the park will not have a usable patrol cabin and ranger patrols of this part of the Katmai coast will 1) not occur; 2) occur on a less frequent basis; or 3) necessitate overnight camping in tents.

If the Superintendent has determined that the action is necessary and appropriate in Wilderness, proceed to Step 2 to determine the minimum activity.

**STEP 2: Determine the minimum activity.**

Describe the methods and techniques to be used, when the activity will take place, where the activity will take place, what mitigation measures are necessary, and the general effects to the wilderness resource and character.

**Alternative #1: Proposed Action, Replace the Cabin**

### Description:

The patrol cabin would be replaced. Work would be conducted during summer when access to the cabin would be via floatplane and boat. Motorized equipment would be used in a limited way during construction work. During occupation, NPS staff would regularly use a motorboat to cross Swikshak Lagoon to access a stream for fresh water.

### Methods Used to Minimize Effects on Wilderness Character:

The four qualities of Wilderness character are 1) untrammeled; 2) undeveloped; 3) natural; and 4) outstanding opportunities for solitude or a primitive and unconfined type of recreation.

The Wilderness qualities of the Katmai coast would be affected by the cabin replacement, as described in step 1(E) above. The undeveloped character of the Swikshak area is already affected by the presence of the dilapidated cabin, outhouse and sauna. The silent and solitary character of Swikshak would be temporarily affected by human presence during work on the cabin. This would be for approximately 2 - 3 summer weeks, during which time opportunity for solitude would be affected. During those times, impacts to natural sounds would include noise from NPS construction, motorboats and aircraft. At the conclusion of the work, the area would return to its normal background noise level with the exception of the arrival and departure of NPS staff by floatplane or less frequently by motorboats.

The presence of a well maintained administrative cabin within the Katmai Wilderness, as opposed to an unusable cabin ruin, would increase the cumulative impacts on Wilderness values. The cabin would result in an increase of NPS use and protection of this area. A well maintained Swikshak cabin would become the focal point of NPS management activities. Future activities would be drawn this existing development rather than occur elsewhere or not at all, such as co-located research facilities, communication facilities, and repeater stations. This would affect the wilderness character of the Swikshak area because of additional human presence and additional facilities.

The benefits of NPS management attention in this remote portion of the park would serve to balance this seasonal human activity.

### Methods Used to Minimize Effects on Heritage and Cultural Resources:

Replacement of the cabin would continue the use of cabins in the Alaska Wilderness.

### Methods Used to Minimize Effects on Traditional Skills:

Local employees would have an opportunity to learn and exercise modern wood working and cabin building skills by replacing the cabin. Hand tools would be used for work on the cabin whenever practical and use of motorized equipment (ex. gasoline powered generator to power saws and other power tools) would be minimized.

### Methods Used to Minimize Effects on Safety of Visitors, Personnel, and Contractors:

All involved personnel would follow park policy and standard safety procedures around any motorized equipment, aircraft, and watercraft.

Methods Used to Minimize Effects on Economic and Time Constraints:

Use of the motorized equipment would decrease the time necessary to complete the project which would limit the time necessary for human work crews to be present at the site. This would improve the opportunity for solitude over having work crews present for more weeks at the site.

Methods Used to Minimize Effects on Additional Wilderness-specific Comparison Criteria:

Not applicable.

**Alternative #2: No Action**

Description: The cabin would not be replaced. Ranger patrols would be significantly reduced.

Any overnight patrol would use “Leave No Trace” camping techniques.

Methods Used to Minimize Effects on Wilderness Character:

The four qualities of Wilderness character are 1) untrammeled; 2) undeveloped; 3) natural; and 4) outstanding opportunities for solitude or a primitive and unconfined type of recreation.

Under the No Action alternative, there would be no change to the wilderness character of the area. The untrammeled and natural character of the area would be preserved as it is in Alternative 1. The cabin would be allowed to disintegrate under benign neglect and the landscape would slowly recover from the developed affects of the cabin. The presence of NPS personnel camping in the area instead of using the cabin would contribute to the development of campsite on the Swikshak peninsula. The opportunity for solitude would be somewhat greater than in the proposed action.

Methods Used to Minimize Effects on Heritage and Cultural Resources:

The non-historical cabin would be lost through degradation.

Methods Used to Minimize Effects on Maintaining Traditional Skills:

Local employees would not have the opportunity to exercise modern woodworking and cabin building skills.

Methods Used to Minimize Effects on Economic and Time Constraints:

The ranger patrols that would have been conducted out of the Swikshak cabin would not be conducted as frequently, which would result in a lack of enforcement presence in the area and increased violations of park regulations. If the ranger patrols were conducted, they would be short term (approximately one to five days in duration). Flying in would result in more fuel consumption and more noise and intrusions from these additional flights.

**STEP 2 DECISION: What is the minimum activity?**

**The selected alternative is:** The Proposed Action, Alternative #1, Replace the Swikshak Cabin.

**Describe the rationale for selecting this alternative:**

The cabin replacement would provide a shelter for park administrative purposes. Using this facility meets the park management goals. The Superintendent has determined that this action

is necessary to meet minimum requirements for the administration of the area for the purposes of the Wilderness Act. The use of motorized tools in this remote part of the park would be of short duration and limited to the necessary use for cabin construction. Hand tools would be used whenever practical. Aircraft and motorboat use is in accordance with ANILCA and implementing regulations.

**Wilderness Act Section 4(c) uses proposed in the proposed action:**

- 1. Mechanical transport (provided in ANILCA regulations).
- 2. Landing of aircraft (provided in ANILCA regulations).
- 3. Motorized equipment (for temporary cabin construction).
- 4. Temporary road.
- 5. Motor vehicles.
- 6. Structure or installation (replacement of an existing dilapidated NPS patrol cabin).
- 7. Motorboats (provided in ANILCA regulations).

**Legal Authority for allowing an exception to Wilderness Act Section 4(c) uses:**

- Special provision in the Wilderness Act.
- Special provision in Wilderness legislation (ANILCA); for #1, 2, and 7.
- Required in an emergency involving the health and safety of persons within the area.
- Necessary to meet the minimum requirements for the administration of the area for the purpose of the Wilderness Act; for #3 and 6.

The approval below certifies that the Swikshak cabin replacement is necessary and appropriate in Katmai Wilderness and that the methods of construction and cabin use are the minimum necessary.

<b>Approvals</b>	<b>Signature</b>	<b>Name</b>	<b>Position</b>	<b>Date</b>
Prepared by:		Dick Anderson	AKRO Environmental Protection Specialist	02-09-10
Reviewed by:		Wendy Artz	KATM Wilderness Coordinator	02-01-10
Reviewed by:		Daniel Noon	KATM Chief of Environmental Planning	02-01-10
Approved:		Ralph Moore	KATM Superintendent	

**APPENDIX C**  
**NATIONAL HISTORIC PRESERVATION ACT, SECTION 106**  
**COMPLIANCE AND DOCUMENTATION**

The following letter from the Alaska State Historic Preservation Officer documents concurrence with the NPS finding that the existing Swikshak cabin is not eligible for the National Register of Historic Places.

# STATE OF ALASKA

**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF PARKS & OUTDOOR RECREATION**  
**OFFICE OF HISTORY AND ARCHAEOLOGY**

**SEAN PARNELL, GOVERNOR**

550 WEST 7<sup>TH</sup> AVENUE, SUITE 1310  
ANCHORAGE, ALASKA 99501-3565

PHONE: (907) 269-8721  
FAX: (907) 269-8908

October 29, 2009

File No.: 3130-1R NPS/LAKA  
3330-6N AFG-254

**SUBJECT:** Determination of Swikshak Cabin (AFG-254)  
Katmai National Park and Preserve, Alaska

Ralph Moore, Superintendent  
Katmai National Park & Preserve  
P. O. Box 7  
King Salmon, AK 99613-0007

Dear Mr. Moore,

The State Historic Preservation Office received your correspondence dated October 13, 2009. We have reviewed your determination of eligibility for the Swikshak Cabin (AFG-254) in accordance with 36 CFR 63 and concur with your finding that AFG-254 is not eligible for the National Register of Historic Places.

Please contact Stefanie Ludwig at 269-8720 if you have any questions or if we can be of further assistance.

Sincerely,



Judith E. Bittner  
State Historic Preservation Officer

JEB:sl

## **APPENDIX D COASTAL ZONE MANAGEMENT NEGATIVE DETERMINATION**

The State of Alaska has an approved coastal zone management program, the Alaska Coastal Management Program (ACMP) which includes regulations in Title 11, Chapter 112 of the Alaska Administrative Code (11 AAC 112). The Alaska Department of Natural Resource's Office of Project Management & Permitting (OPMP) coordinates review of federal consistency determinations as per 11 AAC 110. The Alaska Coastal Policy Council promulgates standards in the ACMP in chapter 112 of Title 11 (11 ACC 112). Coastal Zone Management Act (CZMA) Federal Consistency Regulations (15 CFR 930.35(b)) state that negative determinations include an evaluation of the relevant policies set forth in the ACMP and applicable district programs.

The National Park Service (NPS) is proposing to reconstruct the Swikshak Bay patrol cabin in Katmai National Park (T. 19S, R. 39W, S. 7 Seward Meridian; 58° 32' 41.8" N / 155° 47' 11.94" W). Lands in the project area fall within the coastal zone of the State of Alaska and the Kodiak Island Borough (ACMP "Coastal Zone Boundaries of Alaska" Map #60 for the Mt. Katmai Quadrangle). The project would be located on lands under federal jurisdiction, which are outside the coastal zone.

A detailed description of the Katmai National Park, Swikshak Bay Cabin Reconstruction Plan is provided in the attached environmental assessment. Alternative 2 is the NPS preferred alternative.

The following section details the NPS's Negative Determination. In determining effects, the NPS followed 15 CFR 930.33(a)(1) and has included an evaluation of the relevant enforceable policies of the ACMP (11 A.A.C. 112) and the Kodiak Island Borough Coastal Management Plan (July 2007). State standards included for analyses are coastal development; natural hazard areas; coastal access; sand and gravel extraction; subsistence; transportation routes and facilities; habitats; and historic, prehistoric, and archaeological resources.

### **11 AAC 112.200. Coastal Development**

(a) In planning for and approving development in or adjacent to coastal waters, districts and state agencies shall manage coastal land and water uses in such a manner that those uses that are economically or physically dependent on a coastal location are given higher priority when compared to uses that do not economically or physically require a coastal location.

(b) Districts and state agencies shall give, in the following order, priority to

(1) water dependent uses and activities;

(2) water related uses and activities; and

(3) uses and activities that are neither water dependent nor water related for which there is no practicable inland alternative to meet the public need for the use or activity.

(c) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with the standards contained in 33 C.F.R. Parts 320 - 323, revised as of July 1, 2003.

*Analysis: The proposed activity is not water dependent or water related and is not located adjacent to coastal (salt) waters. The facility would be located in an upland location approximately 0.2 mile from Swikshak Bay of Shelikof Strait. The reconstructed facility would provide operational support to properly manage the Swikshak Bay area and nearby coastal areas of Katmai National Park.*

*The project location is within an upland area. No discharge of dredged or fill material into coastal (salt) waters would occur.*

## **11 AAC 112.210. Natural Hazard Areas**

- (a) In addition to those identified in 11 AAC 112.990, the department, or a district in a district plan, may designate other natural processes or adverse conditions that present a threat to life or property in the coastal area as natural hazards. Such designations must provide the scientific basis for designating the natural process or adverse condition as a natural hazard in the coastal area, along with supporting scientific evidence for the designation.
- (b) Areas likely to be affected by the occurrence of a natural hazard may be designated as natural hazard areas by a state agency or, under 11 AAC 114.250(b), by a district.
- (c) Development in a natural hazard area may not be found consistent unless the applicant has taken appropriate measures in the siting, design, construction, and operation of the proposed activity to protect public safety, services, and the environment from potential damage caused by known natural hazards.
- (d) For purposes of (c) of this section, “appropriate measures in the siting, design, construction, and operation of the proposed activity” means those measures that, in the judgment of the coordinating agency, in consultation with the department’s division of geological and geophysical surveys, the Department of Community and Economic Development as state coordinating agency for the National Flood Insurance Program under 44 C.F.R. 60.25, and other local and state agencies with expertise,
  - (1) satisfy relevant codes and safety standards; or
  - (2) in the absence of such codes and standards;
    - (A) the project plans are approved by an engineer who is registered in the state and has engineering experience concerning the specific natural hazard; or
    - (B) the level of risk presented by the design of the project is low and appropriately addressed by the project plans.

*Analysis: The proposed project is not located in a designated natural hazard area.*

## **11 AAC 112.220. Coastal Access**

District and state agencies shall ensure that projects maintain and, where appropriate, increase public access to, from, and along coastal water.

*Analysis: The policy would not be applicable because the proposed project is not located adjacent to coastal (salt) waters and thus would not affect coastal access. The proposed project would not affect existing public access to the Swikshak River, Swikshak Lagoon, or coastal areas of Katmai National Park.*

## **11 AAC 112.260. Sand and Gravel Extraction**

Sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands, and spits if there is no practicable alternative to coastal extraction that will meet the public need for the sand or gravel.

*Analysis: The policy would not be applicable because no sand and gravel would be extracted from coastal waters for this project. Small amounts of gravel for construction purposes would be obtained from on site excavation for a pit privy.*

## **11 A.C 112.270. Subsistence**

- (a) A project within a subsistence use area designated by the department or under 11 AAC 114.250(g) must avoid or minimize impacts to subsistence uses of coastal resources.
- (b) For a project within a subsistence use area designated under 11 AAC 114.250(g), the applicant shall submit an analysis or evaluation of reasonably foreseeable adverse impacts of the project on subsistence use as part of
  - (1) a consistency review packet submitted under 11 AAC 110.215; and
  - (2) a consistency evaluation under 15 C.F.R. 930.39, 15 C.F.R. 930.58, or 15 C.F.R. 930.76.
- (c) Repealed 10/29//2004, Register 172.
- (d) Except in nonsubsistence areas identified under AS 16.05.258, the department may, after consultation with the appropriate district, federally recognized Indian tribes, Native corporations, and other appropriate persons or groups, designate areas in which a subsistence use is an important use of coastal resources as demonstrated by local usage.
- (e) For purposes of this section, “federally recognized Indian tribe,” “local usage”, and “Native corporation” have the meanings given in 11 AAC 114.990.

*Analysis: The policy would not be applicable because the proposed project is not located within a designated subsistence use area designated under 11 AAC 114.250(g). Per ANILCA, subsistence activities are only permitted in Katmai National Preserve, not in Katmai National Park. The effects of the proposed action on subsistence uses and needs were dismissed from further analysis in the EA because the proposed action is located in the Park.*

## **11 AAC 112.280. Transportation Routes and Facilities**

Transportation routes and facilities must avoid, minimize, or mitigate

- (1) alterations in surface and ground water drainage patterns;
- (2) disruption in known or reasonably foreseeable wildlife transit; and
- (3) blockage of existing or traditional access.

*Analysis: The proposed project would not alter surface or ground water drainage patterns.*

*The proposed project would remove approximately 1 acre of wildlife habitat during construction of the cabin and outhouse. Brush and trees in the previously undisturbed area would not be cut*

*between April 10 and July 15 to avoid impacts to nesting birds and to comply with the Migratory Bird Treaty Act.*

*Mitigation measures would be implemented to minimize bear-human interactions. Immediately adjacent to the project area, bears, small mammals, and other wildlife could be temporarily displaced due to noise and activities associated with construction, causing a short-term adverse impact. Displaced wildlife would not likely have difficulty becoming established elsewhere on lands in close proximity, since no prime or unique habitat would be lost.*

*Existing access to the area would not be blocked. Implementation of the proposed project may temporarily impact visitor use patterns near the proposed project area during construction activities.*

### **11 AAC 112.300. Habitats**

(a) Habitats in the coastal area which are subject to the program are:

- (1) offshore areas;
- (2) estuaries;
- (3) wetlands;
- (4) tidflats;
- (5) rocky islands and seacliffs;
- (6) barrier islands and lagoons;
- (7) exposed high energy coasts;
- (8) rivers, streams and lakes and the active floodplains and riparian management areas of those rivers, stream and lakes; and
- (9) important habitat.

(b) The following standards apply to the management of the habitats identified in (a) of this section:

- (1) offshore areas must be managed to avoid, minimize or mitigate significant adverse impacts to competing uses such as commercial, recreational or subsistence fishing, to the extent that those uses are determined to be in competition with the proposed use;
- (2) estuaries must be managed to avoid, minimize or mitigate significant adverse impacts to
  - (A) adequate water flow and natural water circulation patterns; and
  - (B) competing uses such as commercial, recreational or subsistence fishing, to the extent that those uses are determined to be in competition with the proposed use;
- (3) wetlands must be managed to avoid, minimize or mitigate significant adverse impacts to water flow and natural drainage patterns;
- (4) tidflats must be managed to avoid, minimize or mitigate significant adverse impacts to
  - (A) water flow and natural drainage patterns; and
  - (B) competing uses such as commercial, recreational or subsistence uses, to the extent that those uses are determined to be in competition with the proposed use;
- (5) rocky islands and sea cliffs must be managed to

- (A) avoid, minimize or mitigate significant adverse impacts to habitat used by coastal species; and
- (B) avoid the introduction of competing or destructive species and predators;
- (6) barrier islands and lagoons must be managed to avoid, minimize or mitigate significant impacts
  - (A) to flows of sediments and water;
  - (B) from the alteration or redirection of wave energy or marine currents that would lead to the filling in of lagoons or the erosion of barrier islands; and
  - (C) from activities that would decrease the use of barrier islands by coastal species, including polar bears and nesting birds;
- (7) exposed high energy coasts must be managed to avoid, minimize or mitigate significant adverse impacts
  - (A) to the mix and transport of sediments; and
  - (B) from redirection of transport processes and wave energy;
- (8) rivers, streams and lakes must be managed to avoid, minimize or mitigate significant adverse impacts to
  - (A) natural water flow;
  - (B) active floodplains; and
  - (C) natural vegetation within riparian management areas; and
- (9) important habitat
  - (A) designated under 11 A.A.C. 114.250(h) must be managed for the special productivity of the habitat in accordance with district enforceable policies adopted under 11 A.A.C. 114.270(g); or
  - (B) identified under (c)(1)(B) or (C) of this section must be managed to avoid, minimize or mitigate significant adverse impacts to the special productivity of the habitat.
- (c) For purposes of this section,
  - (1) “important habitat” means habitats listed in (a)(1) - (8) of this section and other habitat in the coastal area that are:
    - (A) designated under 11 A.A.C. 114.250(h);
    - (B) identified by the department as a habitat
      - (i) the use of which has a direct and significant impact on coastal water; and
      - (ii) that is shown by written scientific evidence to be biologically and significantly productive; or
    - (C) identified as state game refuges, state game sanctuaries, state range areas or fish and game critical habitat under A.S. 16.20;
  - (2) “riparian management area” means the area along or around a waterbody within the following distances, measured from the outermost extent of the ordinary high water mark of the waterbody:
    - (A) for the braided portions of a river or stream, 500 feet on either side of the waterbody;
    - (B) for split channel portions of a river or stream, 200 feet on either side of the waterbody;
    - (C) for single channel portions of a river or stream, 100 feet on either side of the waterbody;
- (d) For a lake, 100 feet of the waterbody.

*Analysis: The policy would not be applicable since the project would not affect any habitats in the coastal area (The project site is located within an upland area about 0.2 miles from the marine waters of Swikshak Bay and about 0.2 miles from the Swikshak River lagoon. The facility would be outside of the 100 foot minimum distance from the ordinary highwater mark of anadromous fish waters and would not have any effects on these waters.*

## **11 AAC 112.320. Historic, Prehistoric, and Archeological Resources**

- (a) The department will designate areas of the coastal zone that are important to the study, understanding or illustration of national, state or local history or prehistory, including natural process.
- (b) A project within an area designated under (a) of this section shall comply with the applicable requirements of A.S. 41.35.010 – 41.35.240 and 11 A.A.C. 16.010 – 16.900.

*Analysis: The proposed project areas have been surveyed and the National Park Service has informally consulted with the SHPO. The NPS has determined that potential cultural resource impacts would not require formal consultation with SHPO beyond the existing Memorandum of Agreement (MOA).*

## **KODIAK CMP**

Enforceable Policies of the Kodiak CMP that apply to the Swikshak Bay Cabin Reconstruction Plan are described below.

### **Enforceable Policy: Coastal Development:**

A-1 Water Dependent and Water Related Activities: *See analysis above or 11 AAC 112.200, Coastal Development.*

A-2 Multiple Use: *The policy would not be applicable since the project would not require the placement of fill or structures in coastal waters.*

A-3 Fill Requirements: *The policy would not be applicable since the project would not require the placement of dredged or fill materials in coastal waters.*

### **Enforceable Policy: Subsistence/Personal Use:**

D-1 Development in Subsistence Waters: *The policy would not be applicable because the proposed project is not located within a designated subsistence use area designated under 11 AAC 114.250(g).*

### **Enforceable Policy: Transportation,**

E-1 Maintaining Traditional Coastal Access: *The policy would not be applicable because the proposed project is not located adjacent to +coastal (salt) waters and thus would not affect coastal access. Existing access to the Brooks River area of Katmai National Park would not be blocked. See analysis for 11 AAC 112.280 Transportation routes and facilities.*

**Enforceable Policy: Natural Hazard Areas**

G-1 Erosion and G2 Subdivisions Design: *The proposed project is not located in a designated natural hazard area.*

**Enforceable Policy: Recreation**

*The policy would not be applicable because the proposed project is not located within a designated recreation use area.*

**Enforceable Policy: Sand and Gravel Extraction and Processing**

K-1 Siting of Material Sources: *Analysis: Crushed gravel for construction purposes would be obtained from the existing KATM gravel pit located approximately 4.5 miles southeast of the project area along the Valley of Ten Thousand Smokes Road.*

**NEGATIVE DETERMINATION**

Based on the above information the National Park Service finds that the Katmai National Park and Preserve Swikshak Bay Cabin Reconstruction Plan would not have any effects on land or water resources in the State of Alaska's coastal zone.

# APPENDIX E CABIN DESIGN DRAWINGS

**ROUND MILLED LOG DETAIL**  
TOP TO SCALE

**ROUND MILLED LOG DETAIL**  
TOP TO SCALE

**ROUND MILLED LOG DETAIL**  
TOP TO SCALE

**GENERAL "SUPERIOR LOGS" SPECIFICATIONS:**

1. SWEDISH CORE LOGS WITH INSULATION IN CORE & SADDLE CORNER.
2. SEASONED LOGS TO RETARD SETTLING, SHRINK OR LESS MOISTURE.
3. LOGS 6'-8'-10' LATHED TO 1/8" TOLERANCE & CUT INTO 2' MIN TO 12' MAX LENGTHS.
4. PRE-CUT, DRILLED, SLOTTED & NUMBERED TO ASSEMBLE IN HOURS.
5. 1/2" X 3/4" ALL-THREAD MECHANICALLY JOINS LOGS FROM TOP PLATE TO SUBFLOOR OR FOUNDATION. ALL-THREAD IS 4" O.C. OR LESS IN RUNNING WALL 8" OR LESS EITHER SIDE OF OPENING.
6. KEF CUT INTO 8" W/LOGS TO REDUCE EXCESSIVE CHECKING.
7. STANDARD LOG RISES & WALL HEIGHTS:

6" DIAMETER LOG RISES 5 1/2" # COURSE	17 COURSES = 93 1/2" INCHES # PLUS 1 1/2" TOP PLATE.
8" DIAMETER LOG RISES 7 3/8" # COURSE	12 COURSES = 95 7/8" INCHES # PLUS 1 1/2" TOP PLATE.
10" DIAMETER LOG RISES 9 1/2" # COURSE	10 COURSES = 95" INCHES # PLUS 1 1/2" TOP PLATE.

**TENSION SPRING DETAIL**  
AT TOP OF ALL BOLT LOCATIONS (TYP)  
NOT TO SCALE

**'SUPERIOR LOGS' ROUND MILLED WALL**

SUPERIOR PRODUCTS  
1000 W. 10TH AVE. S.  
SPOKANE, IDAHO 83402-3888

TYPICAL LOG DETAILS  
W/ TENSION SPRINGS







