# ENVIRONMENTAL ASSESSMENT FOR INHOLDER ACCESS TO THE STAMPEDE CREEK AREA OF DENALI NATIONAL PARK

# Prepared by UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DENALI NATIONAL PARK AND PRESERVE, ALASKA

July 2009



Mention by the U.S. Department of the Interior National Park Service of trade names or commercial products does not constitute endorsement or recommendation for use.





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to assure that their development is in the best interests of all. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The National Park Service, Alaska Regional Office, provided publication services.

July 2009

# TABLE OF CONTENTS

I. PURPOSE AND NEED	4
Background	4
Park Purpose and Significance	8
Legal Context	
Issues	10
Issues Eliminated From Further Consideration	11
Permits and Approvals Needed to Complete the Project	12
II. DESCRIPTION OF THE ALTERNATIVES	12
Alternative 1- Existing Conditions (No Action)	12
Alternative 2- Certify Inholder Access to the Stampede Area (NPS Preferred)	12
Alternatives Considered and Eliminated from Further Consideration	
Environmentally Preferred Alternative	13
Mitigation and Monitoring.	
III. AFFECTED ENVIRONMENT	15
IV. ENVIRONMENTAL CONSEQUENCESS OF THE ALTERNATIVES	19
Assumptions for Impact Analyses	
Alternative 1- Existing Conditions (No Action)	
Alternative 2- Certify Inholder Access to the Stampede Area (NPS Preferred)	
V. CONSULTATION AND COORDINATION	26
VI. SELECTED REFERENCES	26
APPENDIX A: ANILCA Subsistence 810(a) Evaluation and Findings	28
FIGURES	
Figure 1 – Project Location	
Figure 2 – Stampede Creek Area	
Figure 3 – Stampede Mine Area	7
TABLES	
Table 1 – Comparison of the Alternatives	14
Table 2 – Summary Impacts of the Alternatives	14

#### PURPOSE AND NEED

The National Park Service (NPS) is considering issuing right of way certificates of access (RWCA) to two inholders with property on Stampede Creek in Denali National Park. RWCAs are contract agreements established by the Alaska Region of the National Park Service to document and authorize the inholder access rights established by Section 1110(b) of the Alaska National Interest Lands Conservation Act. RWCAs are needed to describe and document the reasonable and feasible access methods and means landowners may use for access across park lands, and the RWCAs document the methods allowed to maintain that access. RWCAs protect park resources by establishing any necessary limits on the access and maintenance methods. The inholders fly to the Stampede Airstrip and use small motorized vehicles to transport themselves and equipment to their property two miles upstream (Figures 1 and 2).

This environmental assessment (EA) analyzes the potential environmental impacts which could result from the access 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 1508.9), and the NPS NEPA compliance guidance handbook (Director's Order (DO)-12, Conservation Planning, Environmental Impact Analysis, and Decision Making) (NPS, 2001).

# **Background**

Gordon Harrison and Peter Browne own small lots with cabins on Stampede Creek in Denali National Park. Both lots were sold to the inholders before 1980 when the Alaska National Interest Lands Conservation Act (ANILCA) enlarged Mt. McKinley National Park and included the Kantishna Hills and other lands. Via ANILCA the park unit was renamed Denali National Park and Preserve (Denali). The small lots were carved out of 5 patented mining claims owned by Earl Pilgrim, who had developed the Stampede Mine for antimony production after 1936. The Stampede area was prospected in 1905, along with every other creek in the Kantishna Hills. There was some development work in 1916 but lasting activity didn't begin until Earl Pilgrim bought the claims from Billy Taylor in 1936. Pilgrim and partners Morris P. Kirk and Son, Inc. brought production to the point that by 1941 the Stampede Mine was the largest producer of antimony in the state and, at times, the 2<sup>nd</sup> largest producer in the country (See Figure 3).

Pilgrim pioneered the Stampede Trail for winter use, when his caterpillar tractor would pull a sled with 40 tons of ore to the railroad siding at Lignite about 56 miles away. By 1941 Pilgrim cleared a 1,100 foot-long airstrip, just south of the junction of Stampede Creek with the Clearwater Fork of the Toklat River, which he later expanded to 4,000 feet. Starting in 1947 he flew ore to Nenana, first as one-ton shipments and later as 5-ton shipments in C-46 airplanes. Federal Order L-208 closed gold mining during most of World War II, and, although antimony was seen as a strategic metal, wartime manpower shortages limited all mining in the Kantishna Hills. Production during the 1950s and 1960s never did reach that seen during the 1940s, and the last production occurred in 1970. Some of Pilgrim's unpatented claims were located for gold.

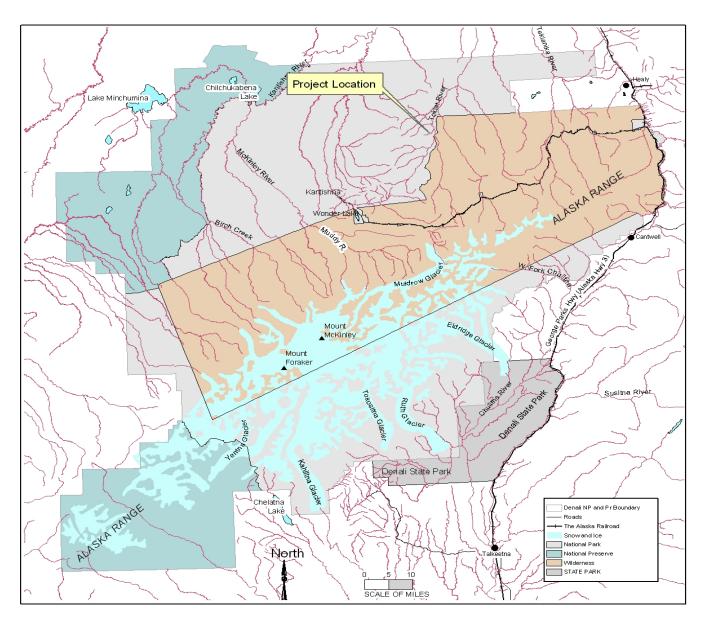




Figure 1
Project Locations
Denali National Park and Preserve
U.S. Department of the Interior National Park Service

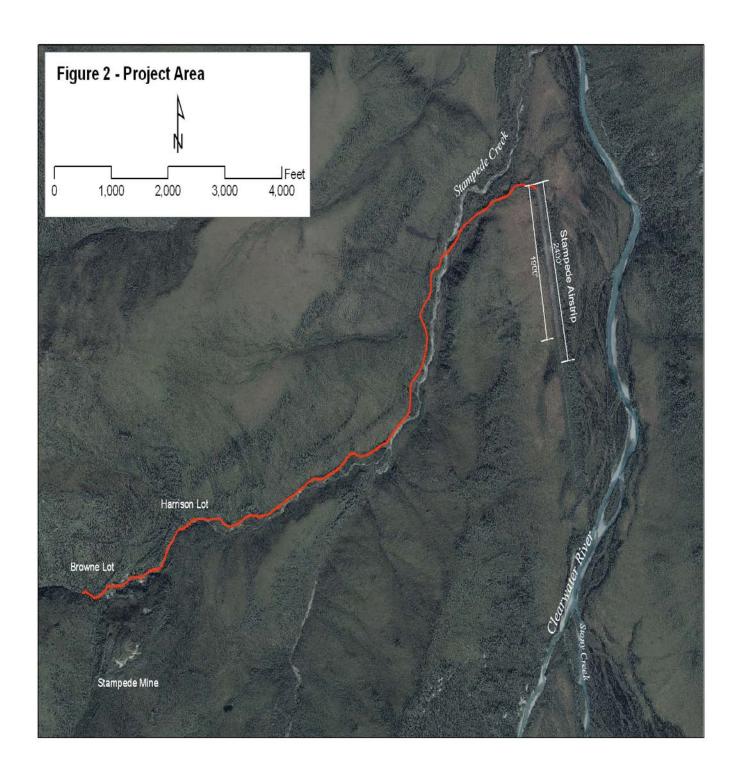




Figure 3 - Stampede Mine Area

Feet

1,000

2,000

Mr. Pilgrim sold his land and mine in 1978. The new owners donated the land to the NPS a year later and gave buildings, facilities and educational mineral rights to the University of Alaska at that time. Those rights were sold to the federal government in 1998 as authorized by the Interior Department's 1998 appropriation bill.

A narrow dirt road from the airstrip to the mine area was bladed and maintained through use during the years Pilgrim owned the mine. This road is about 2 ½ miles long and crosses Stampede Creek just upstream of the airstrip.

# The Stampede Trail (see Statewide RS 2477 Map at:

http://dnr.alaska.gov/ssd/lris/gis/gis maplib/search results.cfm) had long straight sections because the frozen soils allowed the shortest route to be taken on the snow and flat ground. Some cuts were made to terrace edges to allow for gradual descents to the river crossings. Parts of the eastern section of this trail are still used by mushers and snowmobilers in the winter. The Stampede Road was constructed from Lignite to Stampede in 1960 under a state contract. The road followed some of the terrace cuts Pilgrim put in but more generally followed landforms with more gravel in the surface substrates. Bridges were not constructed on the Stampede Road, few culverts were installed, and the road was never travelled its full length by a wheeled vehicle.

# Park Purpose and Significance

In 1917, Congress established Mount McKinley National Park:"...as a public park for the benefit and enjoyment of the people... said park shall be, and is hereby established as a game refuge" (39 Statute 938). Additions to the park were made in 1922 and 1932 to provide increased protection for park values and, in particular, wildlife.

The Alaska National Interest Lands and Conservation Act of 1980 (ANILCA) added approximately 2,426,000 acres of public land to Mt. McKinley National Park and approximately 1,330,000 acres of public land as Denali National Preserve and re-designated the entirety as Denali National Park and Preserve. The Kantishna Hills, including the Stampede Creek area, was added as part of Denali National Park. ANILCA directs the NPS to preserve the natural and cultural resources in the park for the benefit, use, education, and inspiration of present and future generations.

#### **Legal Context**

Section 1110(a) of ANILCA provides for certain special access:

"Notwithstanding any other provision of this Act or other law, the Secretary shall permit, on conservation system units...the use of snowmachines (during periods of adequate snow cover, or frozen river conditions in the case of wild and scenic rivers), motorboats, airplanes, and non-motorized surface transportation methods for traditional activities...and for travel to and from villages and homesites. Such use shall be subject to reasonable regulations by the Secretary to protect the natural and other values of the conservation system units...Nothing in this section shall be construed as prohibiting the

use of other methods of transportation for such travel and activities on conservation system lands where such use is permitted by this Act or other law."

# ANILCA Section 1110(b) provides for access to inholdings:

"Notwithstanding any other provisions of this Act or other law, in any case in which State owned or privately owned land, including subsurface rights of such owners underlying public lands, or valid mining claim or other valid occupancy is within or effectively surrounded by one or more conservation system units, national recreation areas, or those public lands designated as wilderness study, the State or private owner or occupier shall be given by the Secretary such rights as may be necessary to assure adequate and feasible access for economic and other purposes to the concerned land by such State or private owner, or occupier and their successors in interest. Such rights shall be subject to reasonable regulations issued by the Secretary to protect the natural and other values of such lands."

The Department of the Interior promulgated regulations for Title XI of ANILCA in 1986 at 43 CFR 36.10 "Access to Inholdings". The regulations define inholdings and other pertinent terms for access to inholdings, identify those needing a RWCA, describe how to apply for a RWCA, and describe how the agency makes decisions to issue RWCAs.

The pertinent regulation at Title 43 CFR 36.10(e)(1) states: "... the federal agency shall specify in a ROW permit the route(s) and method(s) across the area(s) desired by the applicant, unless it is determined that:

- (i) The route or method of access would cause significant adverse impacts on natural or other values of the area and adequate and feasible access otherwise exists; or
- (ii) The route or method of access would jeopardize public health and safety and adequate and feasible access otherwise exists; or
- (iii) The route or method of access is inconsistent with the management plans for the area or purposes for which the area was established and adequate and feasible access otherwise exists; or
- (iv) The method is unnecessary to accomplish the applicants land use objective."

The NPS Organic Act of 1916 and the General Authorities Act of 1970 prohibit impairment of park resources and values. The 2006 NPS Management Policies use the terms "resources and values" to mean the full spectrum of tangible and intangible attributes for which the park is established and managed, including the Organic Act's fundamental purpose and any additional purposes as stated in the park's establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the NPS is to ensure that park resources and values will continue to exist in an unimpaired condition that will allow people to have present and future opportunities for enjoyment of them.

The evaluation of whether impacts of a proposed action would lead to an impairment of park resources and values is included in this EA. Impairment is more likely when there are potential impacts to a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

# **Issues Selected for Detailed Analysis**

# Vegetation, Wetlands, and Soils

The clearing of additional length on the airstrip and maintenance clearing on the access trail would affect vegetation and could affect wetlands values and functions.

#### Wildlife and Habitat

The use and maintenance of the airstrip and access route would result in a permanent loss of some habitat.

# Aquatic Resources

The infrequent use and maintenance of the access route near Stampede Creek could have an impact on the aquatic organisms.

#### Cultural Resources

The use of the trail and the brushing around the cabins in the Stampede Mine area could affect the historical landscape integrity.

#### Inholder Property

The documentation of established inholder access routes and means could remove uncertainty regarding access to private lands and improve property values.

#### Public Access and Recreational Use

The use and maintenance of established access routes and means would occasionally affect natural sounds and visual quality enjoyed by park visitors in the affected areas of the park. The proposal could also encourage additional general public use of the area.

#### Park Management

The use by the inholders of motorized equipment to maintain the access route could require officials to recognize public maintenance of the airstrip (see Park Management, p.19).

# **Issues Dismissed From Detailed Analysis**

<u>Air Quality</u> - Both the Clean Air Act of 1977 (CAA) and NPS 2006 Management Policies (NPS 2006b) require the NPS to consider air quality impacts from their projects. The park is a Federal Class 1 Air Quality Area under the CAA. Air quality is monitored near park headquarters and no pollutants have been documented to exceed National Ambient Air Quality Standards within the park. The use of small motorized equipment for a few hours per year would result in only short-term negligible impacts on air quality.

<u>Soundscapes</u> - Natural soundscapes in the area would be impacted by the use of small motorized equipment on the access route. These impacts would be of short duration, infrequent, and of low intensity.

<u>Floodplains</u> - E.O. 11988, Floodplain Management, requires all federal agencies to take action to reduce the risk of flood loss, to restore and preserve the natural beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. The project does not put any new facilities in floodplains, so this impact topic does not apply.

#### Wilderness

The area was determined not eligible for wilderness designation in the park's 1986 General Management Plan.

# Threatened and Endangered Species

In compliance with the Endangered Species Act, Section 7, the U.S. Fish and Wildlife Service was consulted. No federally designated threatened or endangered species are known to occur within the park (Swem 2000), and none are anticipated to be affected by this project.

#### Subsistence

The use of motorized vehicles on this access route would not result in a significant restriction of subsistence uses on federal public lands. Under the provisions of ANILCA (section 202(3)(a) and Title VIII), local rural residents are authorized to engage in subsistence activities including hunting, fishing, and trapping in the 1980 additions to Denali National Park. Neither of the alternatives addressed in this EA would significantly restrict subsistence uses. For additional information, see the ANILCA Section 810 Subsistence Evaluation in Appendix A.

<u>Local Communities/Socioeconomic Resources</u> – There would be a negligible beneficial effect to the local economy from issuing this permit. The inholders would travel to the Stampede landing strip with local contracted air carriers for a few trips per year.

# Effects on Minority and Low-Income Populations

Executive Order 12898 requires federal agencies to incorporate environmental justice into their missions by identifying and addressing high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The proposed access would not result in disproportionately high direct or indirect adverse effects on any minority or low-income population or community.

# 1.5 Permits and Approvals Needed to Implement Project

# Rights-of-Way

The NPS would issue ANILCA 1110(b) Right-of-Way Certificates of Access (RWCA) to the owners of private land in the Stampede area. Each RWCA would include a map of the ROW use area and specific terms and conditions to protect park resources and values.

# Alaska SHPO Approval

The State Historic Preservation Office (SHPO) must be given an opportunity to comment on and approve/deny the issuance of any RWCA that could adversely affect historic or archeological resources.

#### **ALTERNATIVES**

#### **Alternative 1: No Action**

Under the No Action Alternative, the two inholders at Stampede Creek would continue to fly to the Stampede Airstrip and ski or walk to their land 2 1/2 miles upstream on the old mining road that leads to the Stampede Mine area. They would likely trim and cut vegetation to maintain the Stampede Airstrip at its present cleared length of 1,900 feet. Both would likely use power wheelbarrows to take supplies from the airstrip to their cabins.

# **Alternative 2: Proposed Action (NPS Preferred Alternative)**

Under Alternative 2 the NPS would issue a RWCA to each owner of private land in the Stampede Creek area. These RWCAs would authorize on park lands the following activities requested by the inholders:

- The Stampede Airstrip could be maintained for a usable length of 1,800 feet and 75 feet of width. This usable length would require clearing of tall vegetation for approximately 2,400 feet to maintain obstacle-free approach and take-off areas.
- Power tools such as power mowers, small chainsaws or brush cutters could be used to remove vegetation from the surface of the Stampede Airstrip and from vegetation overhanging the access road.
- Small motorized equipment such as 4-wheelers and power wheelbarrows could be used to transport the inholders, their guests, and supplies on the 2 ½ mile long former mining route between the landing strip and the Stampede Mine area. This use should be not create ruts or cause erosion. Minor maintenance with a shovel could be used to repair natural erosion damage.

# **Alternatives Considered and Eliminated from Further Evaluation**

1. Consideration was given to an alternative that would allow the inholders to clear the full 4,000 foot length of the Stampede Airstrip. No specific vehicle, such as a DC-3, or C-46, or other need has been identified to require clearing a 4,000 foot landing strip.

2. Consideration was given to providing an open permit to the use of a helicopter for sling-loading supplies onto park land near the inholdings. The generally infrequent requests for this type of activity will be handled on a case-by-case basis and will require a special use permit issued from the park superintendent.

# **Environmentally Preferred Alternative**

Alternative 1 (No Action) is identified as the Environmentally Preferred Alternative because it affects the least wildlife habitat and vegetation acreage.

# **Mitigation and Monitoring**

Mitigation measures are specific actions that when implemented reduce impacts, protect park resources, and protect visitors. The following mitigation would be implemented under the action alternative and are assumed in the analysis of effects.

<u>Vegetation</u>: Vegetation would only be cut in the fall so that ground-nesting or other nesting birds would not be disturbed.

<u>Soils:</u> The inholders would be required to contact the superintendent to make any repairs to the mine road that could not be fixed with a hand tool.

<u>Wildlife and Habitat:</u> Food, garbage, and other bear attractants would be stored in the airstrip building or other approved bear-resistant containers until those materials can be transported to the inholdings or flown out.

<u>Cultural Resources:</u>. Since many historic sites in the mine area are potentially eligible for the National Register of Historic Places, these sites are protected under federal law and collecting or otherwise disturbing these features is strictly prohibited.

<u>Visitor Use and Recreation:</u> Power equipment would have mufflers suitable to reduce noise impacts. The inholders would notify the superintendent when and where vegetation removal activities on the airstrip would occur so that NPS could issue warnings to area aviators.

<u>Park Management</u>: The airstrip would be designated by the Superintendent as open to general public access and use. This would allow public users to use non-motorized tools to maintain the airstrip but would continue to require a permit for anyone wanting to use motorized equipment to maintain the airstrip.

**Table 1. Comparison of the Alternatives** 

<b>Maintenance and</b>	Alt. 1 (No action)	Alt. 2 Certify Inholder Access (NPS Preferred
<u>Use</u>		<u>alternative)</u>
Stampede Airstrip	Maintains approximately	Maintains approximately 2,400 feet by 75 feet
	1,900 feet by 75 feet with	with power mower.
	power mower.	
Former Mine Road	Uses power wheelbarrow to carry supplies along mine	Uses power wheelbarrow to carry supplies along mine road. May use 4-wheeler as need arises.
	road. Shovel maintenance of	Shovel maintenance of route.
	route.	
Helispot	Permitted in 2008 with	Brushing and use of helispot would be on as-
	Special Use Permit. Would	needed basis, with notification of
	need Special Use Permit for	Superintendent.
	each landing.	
Park Access	Generally without a permit.	RWCA issued.
Permit		

**Table 2. Summary Impacts of the Alternatives** 

IMPACT	Alt. 1 – No Action	Alt. 2 – Issue RWCAs (NPS Preferred
TOPIC		Alternative)
Vegetation,	Minor continued impact from	Minor impact from maintenance brushing, as
Soils and	maintenance brushing, as needed, on	needed, on 6.5 acres of airstrip and former mine
Wetlands	5.7 acres of airstrip and former mine	road.
	road.	
Wildlife and	Continuing minor habitat loss on 5.7	Continuing minor habitat loss on 5.7 acres and
Habitat	acres.	new minor habitat loss on 0.8 acres. Minor
		habitat loss.
Aquatic	Negligible impact.	Negligible impact.
Resources		
Cultural	Negligible impact	Negligible impact.
Resources		
Inholder	Negligible to minor adverse impacts to	Minor beneficial impact from documentation of
Property	inholder property from lack of	access rights.
	documentation of access rights.	
Public Access	Minor beneficial impact from keeping	Minor beneficial impact from extending the
and	the airstrip open for use.	landing area and keeping the airstrip open for
Recreational		use.
Use		
Park	Minor beneficial impact from keeping	Minor beneficial impact from keeping the
Management	the airstrip open for use.	airstrip open for use.

#### III. AFFECTED ENVIRONMENT

Detailed descriptions of the environment in the area may be found in the 1986 GMP. Detailed descriptions of the mining and transportation history of the area may be found in Brown (1993) and Norris (2007 and 2008), which is summarized in the background section of chapter 1. This section summarizes the natural and human environment that may be affected by the proposal and alternatives under consideration.



# Vegetation, Wetlands, and Soils

The Stampede area ranges in elevation from 1,850 feet at the airstrip to 2,100 feet at the mine. This compares with 1,950 feet at Wonder Lake. The lower ridges and interfluves are covered with a mix of black spruce forest, black spruce woodland, and ericaceous shrub vegetation and a thick moss cover, with the smallest drainages marked by sinuous bands of shrub willow. The Clearwater Fork has sections of drier floodplain that support white spruce forest communities, with few cottonwoods and birch.

Stampede Creek is fairly open in its lower mile, both in vegetation and in landscape, except at the mouth where the trees and alders close in near the creek. The north bank of the creek slopes very gradually away from the water. The creek generally cuts in close to a higher terrace edge on

the south bank. Trees near the creek increase in density upstream, as does the steepness of the surrounding terrain.

The parent materials of the soils are colluvium derived from schist and mica-rich loess over colluvium derived from schist (Clark and Duffy 2006). Permafrost is regionally discontinuous, but it is likely continuous under much of the lower access road where the road is more than 5 feet from the creek bank. The airstrip soils are generally well-drained. The soils along the access road from the Stampede Landing Strip to mine and private lands lack fines and organic material because it was removed to support dump truck traffic during mining operations. Subsequent erosion keeps those materials off the road surface so the road continues to support light traffic without maintenance or resulting in any ruts.



# Wildlife Values and Habitat

The common and uncommon mammals and birds of interior Alaska are all represented in the Stampede area. Black bears are probably more common than grizzly bears. The most common wildlife species in the area are snowshoe hares, marten, voles and other small mammals, and various birds such as willow ptarmigan, ravens, and numerous migratory species of sparrows, warblers, hawks and owls. The area provides moose habitat throughout, especially along the drainages where willow browse is the thickest. Grizzly bears use the slopes for blueberries and

crowberries. Wolves and caribou may also be found traversing the area, and lynx numbers will rise and fall with snowshoe hare cycles. Mosquitoes are a constant companion from late May until early August.

# **Aquatic Resources and Water Quality**

Stampede Creek may have been placer mined prior to 1970, but the evidence and information is inconclusive. The lode mining upstream, however, produced a lot of overburden and tailings that were disposed of in the creek floodplain. Some of the tailings have washed downstream and filled pools and riffles. In a 1983 survey many grayling fry and no sculpin were observed 0.6 miles above the junction with the Clearwater. (Deschu and Kavanagh 1986). Other observers saw few sculpin and few grayling.

In general, the concentrations of most priority trace metals in Stampede Creek drainage meet EPA drinking water standards, or at least rapidly decline with distance from the source environment (the mine and tailings pile). However, elevated antimony (and arsenic) concentrations were observed near the tailings pile (up to 260 parts per billion) as well as several miles downstream from the mine source. For comparison, safe drinking water standards for antimony, as determined by the EPA, are 6 parts per billion. This spatial distribution of antimony indicates that it remains highly mobile in the Stampede drainage (NPS 2008). Water quality in the creek is affected by heavy metal concentrations as a result of high background levels and past mining.

#### **Cultural Resources**

The Stampede Mine consists of a mill building, warehouse, 2 bunkhouses, Pilgrim's cabin, cache and greenhouse, and other outbuildings. The University of Alaska fixed up the bunkhouse in the early 1980s for educational use, but geology field classes were only held on site twice. The Stampede Mine was declared potentially eligible for the National Register of Historic Places in 1983 by the State Historic Preservation Officer (SHPO). The former assay office was demolished in 1987 during an explosion resulting from an overly successful attempt by the U.S. Army Ordinance from Ft. Wainwright and the NPS to burn 4,000 pounds of ammonium nitrate that Pilgrim had stockpiled in the mill for use in tunneling and excavations. The metal siding of the mill building was blown off also during the explosion, though the frame remains. The explosion in 1987 removed enough integrity from the site so that a new Determination of Eligibility would need to be approved by the SHPO.

The NPS staged personnel at the landing strip in the late 1980s to evaluate the impacts of mining to park resources. During the 1990s and early 2000s the NPS brushed around and stabilized the mine buildings.

Another early 20<sup>th</sup> century cabin is resting north of the airstrip just across Stampede Creek.

#### **Visitor Use and Recreation**

The park's Backcountry Management Plan (NPS 2006) puts the Kantishna Hills, including the Stampede Area, in a Management Area B zone. Here visitors are expected to generally encounter 2 or fewer parties per day, always be able to camp out of sight and sound of others, and there may be as many as 10 motorized noise intrusions per day that exceed natural ambient sound.

Few visitors make it to the Stampede area. Some private pilots probably land at the Stampede airstrip and walk up to the mine area. It is likely that more plans land at Stampede in the summer than in the winter. Some backpackers walk downstream on Stony Creek from the park road to reach the area. Numbers for both groups would be small, but are not known. In some years it is possible that the inholders are the only ones to travel up Stampede Creek.

The traditional dog mushing, skiing and snowmachine route from Healy to Kantishna passes by the mouth of Stampede Creek, with people often unaware of it in the tangle of alders. The remnants of the Stampede Road along the Clearwater Fork are not used in winter as people travel on the river ice and snow. One remnant of the Stampede Road does leave the Clearwater Fork ½ mile downstream of Stampede Creek and does provide a clear path to join with the route up Stampede Creek. The Clearwater Fork is famous for winter overflows and often passes through confined areas, so that it can be a difficult place to travel without getting wet.

Both the Stampede Trail and Stampede Road are claimed by the State of Alaska as qualified RS 2477 routes or road easements (see RST 340 and RST 344 at:

http://dnr.alaska.gov/mlw/trails/rs2477/rst\_srch.cfm. The parts of these RS 2477 routes that are within Denali National Park and Preserve have not been adjudicated in Federal Court, so there is no acceptance of those routes or easements by the Department of the Interior.

#### **Park Management**

In 1986 the NPS established a temporary camp on the edge of the Clearwater Fork, just downhill from the Stampede Airstrip. Park personnel were surveying mining claim validity and natural and cultural resources in the Kantishna Hills, and the surveys were to be used in the preparation of a Mining Environmental Impact Statement. Supplies and personnel were brought in from Anchorage and a fire crew cleared vegetation on over 3,500 feet of the airstrip, leaving a tree buffer at the south end. The camp was moved to Friday Creek for the summers of 1987 and 1988. The NPS has not brushed the airstrip since 1986. Subsequent brushing of the airstrip has been completed by the inholders.

The NPS issued a Special Use Permit to the inholders in 2008 to clear a small landing spot at the mine bunkhouse to transport sling loads of supplies with a helicopter.

The NPS initiated development of an Access Users' Guide (Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska [USNPS 2007]) to assist private landowners and valid occupiers in securing access across park public lands under Title XI of ANILCA. This

project resulted in numerous public meetings across the State of Alaska. The NPS proposes to issue RWCAs for these facilities pursuant to ANILCA access regulations for access to inholdings and the Access Users Guide.

The park's 1986 General Management Plan includes a section on Air Access and airstrip maintenance. No airstrips have been listed where the general public maintains the airstrip aside from maintenance through use. This document evaluates and potentially allows the Superintendent to "designate...those strips where maintenance is necessary and appropriate for continued safe public use of the area." This would allow public users to maintain the Stampede airstrip as necessary with hand tools. Use of motorized equipment to maintain the Stampede airstrip would continue to require a permit from the Superintendent.

The Backcountry Plan description for this management area says that administrative presence is generally limited to emergency activities and occasional patrols, with research and resource monitoring in some areas.

# IV. ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

# **Assumptions for Impact Analysis**

This section contains an evaluation of the direct and indirect environmental impacts of an action alternative and the no action alternative. The analysis assumes that the mitigation identified in the *Mitigation and Monitoring* section (page 10) of this environmental assessment would be implemented.

Cumulative actions are those that have additive impacts on a particular environmental resource, whether they are past, present, or reasonably foreseeable future actions. The cumulative impacts relate primarily to the mine, airstrip, mine road, NPS Management actions, and to a lesser extent to the use of the Stampede Trail and Stampede Road.

# **Alternative 1 – Existing Conditions (No Action)**

# Vegetation, Wetlands, and Soils

The inholders would continue to brush the airstrip, which would keep about 3.3 acres of willow and alder shrub and white spruce forest vegetation from growing. Their use would also keep ericaceous shrubs from growing over about 2 acres of the former mining road and would prevent spruce forest from revegetating about 0.4 acres of the former mining road. The soils on the airstrip and former mine road have been bladed in the past to allow for truck traffic, and these soils remain resistant to damage. These vegetation community types and similar soils cover hundreds of thousands of acres in the surrounding landscape of the park, and the impact from this alternative to these abundant and widespread resources would be minor.

#### Wildlife and Habitat

The existing motorized use and maintenance of this access route would result in negligible temporary disturbances to wildlife such as moose, bears, small mammals and birds and their

habitat. New effects to wildlife and its habitat are unlikely to be measurable or detectable. No additional habitat would be lost for small mammals, birds, bears, and moose. This alternative would have a negligible impact on wildlife values.

#### **Aquatic Resources**

The existing infrequent use and maintenance of the access route near and across Stampede Creek would have a negligible impact on the aquatic organisms there or downstream. The release of small amounts of sediment from the vehicle crossings would increase turbidity in the stream for a short distance (probably less than 100 feet downstream) where the inholders drive small vehicles across a somewhat armored ford above the airstrip. There would be a negligible effect on water quality. There would also be a negligible effect on stream macroinvertebrates and the low population of grayling and sculpin who may feed on them because of the very small section of stream directly affected.

# **Cultural Resources**

The buildings are far enough from the access trail that a 5-foot wide ORV on the trail would not hit a building or lead to erosion of soils and sediments near those buildings. The historic landscape between the mine buildings was full of vehicle trails for the heavy equipment used at the mine. The amount of brushing currently employed by the inholders may enhance historic resource protection by lessening the shade around the bunkhouse and nearby structures so that the wooden structures can more easily dry out in the summer sun. The existing infrequent use and maintenance of the trail through the Stampede Mine area would have a negligible adverse effect on historical resources.

# <u>Inholder Property</u>

The status quo would not give certainty to the inholders about their Section 1110b access rights. Maintenance of the airstrip using power tools and any maintenance of the access route on park land would not be authorized.

#### Public Access and Recreational Use

General public use of the area would likely remain at present low levels. Visitors are not likely to encounter more than 2 parties per day, should always be able to camp out of sight and sound of others, and would not likely more than 10 motorized noise intrusions per day that exceed natural ambient sound. This alternative would have a minor beneficial effect on public access and recreation because the continuing maintenance by the inholders of the small airstrip on federal public lands leaves the airstrip open for general use. The existing motorized use and maintenance of the established airstrip and access routes would have a temporary and localized effect on natural sounds and visual quality enjoyed by park visitors in the affected areas of the park.

# Park Management

The existing use of motorized equipment by the inholders on the airstrip helps to maintain the Stampede airstrip for general public use. The airstrip and trail could be used for management purposes such as potentially using the strip for access to the Stampede Mine, use as a base from which to monitor or fight fires, and for natural resource research. This would be in keeping with the description in the Backcountry Plan for administrative presence in the area. Park staff have no plans to use ORVs on the former mining road up Stampede Creek. This alternative would

have a minor beneficial effect on park management by keeping a small airstrip open for fire, search and rescue or other management use.

# Cumulative Impacts of Alternative 1

The total of about 35 acres are disturbed in the Stampede area from the mine, mining road, airstrip, and local sections of the Stampede Road. Almost all of that acreage has some level of vegetative recovery on it, with the mine not being active since 1970, with no heavy traffic on either the mine road or the Stampede Road for 40 years, and with half of the airstrip filled in with vegetation since 1986. The only foreseeable future action in the area is the maintenance necessary to make feasible the continuation of the inholder access. Water quality in the creek is affected by heavy metal concentrations as a result of high background levels and past mining. The cumulative impacts from past, present, and future actions would be minor on most natural resources and would be moderate on aquatic resources. This alternative would contribute at most minor impacts on the natural resources and negligible effects on cultural resources of the area.

# Conclusion

The continuation of annual brushing of the Stampede Airstrip and infrequent motorized use of the Stampede Mine road to access two inholdings would have a negligible impact on aquatic resources and a minor impact on the vegetation, wetlands, soils, wildlife habitat, and cultural resources of the area. The impacts to the inholder property are likely to be minor, and there would be a minor beneficial effect to public recreation and park management from this alternative. The no-action alternative would not result in impairment to any park resources or values that fulfill specific purposes identified in legislation establishing the park or are essential to the natural or cultural integrity of the park.

# **Alternative 2 – Issue RWCAs for Inholder Access to Stampede Area** (NPS Preferred)

#### Vegetation, Wetlands, and Soils

The inholders would be permitted to brush a 2,400 foot length of the airstrip, which would keep about 4.1 acres of willow and alder shrub and white spruce forest vegetation from growing. Their use of the access trail up the Stampede Creek valley would also keep ericaceous shrubs from growing over about 2 acres of the former mining road and would prevent spruce forest from growing on about 0.4 acres on the former mining road. The soils on the airstrip and former mine road may formerly have been wetland types but have been bladed in the past to support truck traffic, and the soils remain resistant to damage. These vegetation communities and soil types cover hundreds of thousands of acres in the surrounding landscape of the park, and the impact to these abundant and widespread resources from this alternative would be minor.

# **Cumulative impacts**

The total acreage disturbed in the Stampede area from the mine, mine road, airstrip and local sections of the Stampede Road is around 35 acres. Almost all of that acreage has some level of vegetative recovery on it, because the mine has been inactive since 1970. There has been no heavy traffic on either the mine road or the Stampede Road for 40 years, and vegetation grew over half of the airstrip since 1986. The only foreseeable future action in the area is the maintenance necessary to make feasible the continuation of the inholder access. The cumulative

impacts to vegetation, wetlands, and soils from past, present, and future actions would be minor. This alternative would contribute only a minor impact on the vegetation, wetlands, and soils resources of the area.

#### Conclusion

The extension of motorized brushing of the Stampede Airstrip to 2,400 feet of length and motorized use and shovel maintenance on the Stampede Mine Road to access two inholdings would have a minor impact on the vegetation, wetlands, and soils resources of the area. This alternative would not result in impacts that result in an impairment on park resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

# Wildlife and Habitat

The motorized use and maintenance of this access route would result in temporary and localized disturbances to wildlife such as moose, bears, small mammals and birds and their habitat. New effects to wildlife and its habitat are unlikely to be measurable or detectable. An additional 0.8 acres of habitat would be lost for small mammals, birds, and moose. This alternative would have a minor impact on wildlife values.

# **Cumulative** impacts

The total acreage of wildlife habitat disturbed in the Stampede area from the mine, mine road, airstrip and local sections of the Stampede Road is around 35 acres. All of that acreage has some level of vegetative recovery and wildlife use on it because the mine not be active since 1970, there has been no heavy traffic on either the mine road or the Stampede Road for 40 years, and half of the airstrip is overgrown with vegetation since 1986. The only foreseeable future action in the area is the maintenance necessary to make feasible the continuation of the inholder access. The cumulative impacts to wildlife and habitat from past, present, and future actions would be minor. This alternative would contribute only a minor impact on the wildlife resources of the area.

#### Conclusion

The extension of motorized brushing of the Stampede Airstrip to 2,400 feet of length and motorized use and shovel maintenance on the Stampede Mine road to access two inholdings would have a minor impact on the wildlife resources of the area. This alternative would not result in impacts that result in an impairment of park wildlife resources that fulfill specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park.

#### **Aquatic Resources**

The proposed infrequent use and maintenance of the access route near and across Stampede Creek would result in nearly no impacts on the aquatic organisms there or downstream. The release of small amounts of sediment from the vehicle crossings would increase turbidity in the stream for a short distance (probably less than 100 feet downstream) where the inholders drive small vehicles across a somewhat armored ford above the airstrip. There would be a negligible effect on water quality. There would also be a negligible effect on stream macroinvertebrates

and the low population of grayling and sculpin who may feed on them because of the very small section of stream directly affected.

# Cumulative impacts

Aquatic resources disturbed in the Stampede area from the mine, mine road, airstrip and local sections of the Stampede Road would include water quality on about 2 ½ miles of Stampede Creek and unknown adverse impacts to the Clearwater Fork. The aquatic resources continue to be depressed by heavy metal concentrations as a result of high background levels and past mining.

There has been some level of aquatic resource recovery with the mine not being active since 1970, with no heavy traffic on either the mine road or the Stampede Road for 40 years, and with the vegetative cover returning on most of the previously disturbed 35 acres related to the lode mine operations. The only foreseeable future action in the area is the maintenance necessary to make feasible the continuation of the inholder access. The cumulative impacts to aquatic resources from past, present, and future actions would be moderate. This alternative would contribute only a negligible additional impact on the aquatic resources of the area.

# Conclusion

The infrequent crossing of Stampede Creek at an armored ford with small vehicles would have a negligible impact on the aquatic resources of the area. This alternative would not result in impacts that result in an impairment on park resources that fulfill specific purposes identified in legislation establishing the park or are key to the natural or cultural integrity of the park

# Cultural Resources

The infrequent use and maintenance of the trail through the Stampede Mine area would not likely have an adverse effect on historical resources. The historic landscape between the mine buildings included vehicle trails for heavy equipment used at the mine, so a 4-foot wide ORV on the trail would not likely hit a building. Occasional brushing around the bunkhouse would enhance historic resource protection by lessening the shade around the bunkhouse and nearby structures so that the wooden structures could more easily dry out in the summer sun.

#### *Cumulative impacts*

The Stampede Mine has not been active since 1970, though two University field camps in the 1980s examined the site, for educational purposes. The explosion in 1987 diminished the integrity of the site as potentially eligible for the National Register of Historic Places. The NPS has stabilized the remaining structures. The only foreseeable future action in the area is the maintenance necessary to make feasible the continuation of the inholder access. The cumulative impacts from past, present, and future actions would be moderate on cultural resources. This alternative would contribute a negligible beneficial impact on cultural resources in the area.

# Conclusion

Authorized brushing around the Stampede Mine bunkhouse and infrequent motorized use of the Stampede Mine road to access two inholdings would have a negligible impact on the cultural resources of the area. This alternative would not result in impacts that have an impairment on

park resources that fulfill specific purposes identified in legislation establishing the park or are key to the natural or cultural integrity of the park.

# <u>Inholder Property</u>

Issuing RWCAs to the inholders would give certainty to the inholders about their Section 1110b access rights. Their need to maintain the airstrip and access route on park land would be documented and authorized, and there would be a full understanding between the inholders and park management about their access rights and limits. There would be a minor beneficial impact to the inholder property rights from this alternative because they would have a documented right to conduct activities on park land that the general public is not allowed to do without a special use permit. This could increase the value of their property.

#### Cumulative impacts

The past actions in the area related to the inholder property have related to the continuing maintenance of the airstrip, the brushing of a trail around the mine structures, and use of the mine road to access their properties. Public recreational use of the area and NPS activities to stabilize mine structures have had negligible effects on the inholder properties. The only foreseeable future action in the area is the maintenance necessary to make feasible the continuation of the inholder access. The cumulative impacts from past, present, and future actions would be minor on the inholder property. This alternative would contribute a minor beneficial impact on the inholder property.

#### Conclusion

Granting the RWCAs to the inholders would give certainty to the inholders about their Section 1110b access rights and have a minor beneficial impact on inholder property.

# Public Access and Recreational Use

The motorized use and maintenance of the airstrip and access route would have a temporary and localized effect on natural sounds and visual quality enjoyed by park visitors in the affected area of the park. General public use of the area would likely remain at low levels. Visitors are not likely to encounter more than 2 parties per day, should always be able to camp out of sight and sound of others, and could hear up to 10 motorized noise intrusions per day that exceed natural ambient sound. This alternative would have a minor beneficial effect on public access and recreation from clearing and lengthening a small airstrip, which would be available for general use. The additional length of the maintained airstrip may attract more public use of the historic Stampede Mine area for recreation.

# **Cumulative impacts**

Actions in the area related to public access and recreational use include the establishment and continuing availability of the Stampede Airstrip for general aviation use, and the construction and continuing use of the mine road as a pedestrian trail for access to the Stampede Mine area. A short segment of the Stampede Road near Stampede Creek has utility as a winter trail. The only foreseeable future action in the area related to public access and recreational use is the maintenance necessary to make feasible the continuation of the inholder access. The cumulative impacts to public access and recreational use from past, present, and future actions would be

moderate. This alternative would contribute a minor beneficial impact to public access and recreational use.

# Conclusion

The continuation of annual brushing of the Stampede Airstrip and infrequent motorized use of the Stampede Mine road to access two inholdings would result in a minor beneficial impact to public access and recreational use.

# Park Management

The use of motorized equipment by the inholder to maintain the Stampede airstrip would make it more feasible for use for management purposes, such as potentially using the strip for access to the Stampede Mine structures, use as a base from which to monitor or fight fires, and for other emergency response activities and natural resource research and monitoring. This would be in keeping with the description in the Backcountry Plan for administrative presence in the area. The issuance of RWCAs would reduce the need for annual Special Use Permitss and discussions with the inholders about access provisions, and certainty of the access terms and conditions would save NPS review time over the long term. Park staff have no plans to use ORVs on the former mining road up Stampede Creek. The former mine road would remain open for use by snowmobiles or dog teams in the winter. This alternative would have a minor beneficial effect on park management by keeping a small airstrip open for NPS management and operations.

# **Cumulative impacts**

The NPS brushed out the airstrip to 3500 feet in 1986. The airstrip is now 1900 feet long. Actions in the area related to park management include the establishment and continuing availability of the Stampede Airstrip for park personnel and visitor use, and the availability of the brushed area in front of the bunkhouse for use as a helicopter landing site or sling load site. A short segment of the Stampede Road near Stampede Creek has utility as a winter trail. The only foreseeable future action in the area related to park management would be monitoring the stabilization of the structures at the mine and inholder adherence to the terms and conditions of the RWCAs. The cumulative impacts to park management from past, present, and future actions would be minor. This alternative would contribute a minor beneficial impact to park management.

# Conclusion

The continuation of annual brushing of the Stampede Airstrip, the brushing of a trail through the Stampede Mine area, and the documentation of the limits of use and maintenance the inholders would be authorized to conduct on their access routes would have a minor beneficial impact on the park management of the area.

#### CONSULTATION AND COORDINATION

# **List of Persons and Agencies Consulted:**

Peter Browne, Inholder, Stampede Creek, Denali National Park

Gordon Harrison, Inholder Stampede Creek, Denali National Park

Ted Swem, U.S. Fish and Wildlife Service, Endangered Species Coordinator, Ecological Services Office, Fairbanks, AK

Jeremy Karchut, Archeologist, Denali National Park and Preserve

Colin Milone, Ranger Pilot, Denali National Park and Preserve

Bud Rice, Environmental Protection Specialist, Alaska Regional Office, National Park Service

Chuck Gilbert, Chief of Lands, Alaska Regional Office, National Park Service

Clarence Summers, Subsistence Specialist, Alaska Regional Office, National Park Service

# **List of Preparers:**

Steve Carwile, Compliance Program Manager, Denali National Park and Preserve Jon Paynter, GIS Specialist, Denali National Park and Preserve

#### SELECTED REFERENCES

#### Brown, William E.

1993. Denali: Symbol of the Alaskan Wild: An Illustrated History of the Denali-Mount McKinley Region, Alaska. Alaska Natural History Association, Denali National Park, Alaska

- Clark, M.H., and M. Duffy. 2004. Soil Survey of Denali National Park and Preserve Area, Alaska. Natural Resources Conservation Service, Palmer, Alaska. Available on Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
- Cowardin, Lewis M., Virginia Carter, Francis C. Golet, and Edward T. LaRoe . 1979. Classification of Wetlands and Deepwater Habitats of the United States. For the U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services. FWS/OBS-79/31.
- Deschu, Nancy A. and Ross C. Kavanagh. 1985. Water Quality and the Effects of Mining in the Kantishna Hills, Denali National Park, 1983. U.S. Department of the Interior, National Park Service. Research/Resources Management Report AR-5. 122 pp.

- Norris, Frank. 2007. Crown Jewel of the North: An Administrative History of Denali National Park and Preserve, Volume 1. National Park Service
- Norris, Frank. 2008. Crown Jewel of the North: An Administrative History of Denali National Park and Preserve, Volume 2. National Park Service
- National Park Service. 1986. General Management Plan, Land Protection Plan, Wilderness Suitability Review, Denali National Park and Preserve, Alaska. Denver Service Center, NPS D-96-A.
  - 1990, Final Environmental Impact Statement for the Cumulative Impacts of Mining, Denali National Park and Preserve, Vol. 1, NPS Denver Service Center, NPS D-121A.
  - 2006, Final Backcountry Management Plan. U.S. Department of the Interior, Denali National Park and Preserve, Denali Park, Alaska
  - 2007, Interim Users' Guide to Accessing Inholdings in National Park System Units in Alaska, Alaska Regional Office, Anchorage, AK , available at: http://www.nps.gov/akso/accessguide.htm
  - 2008. Stampede Creek and the legacy of mining: Antimony in stream water and sediment. U.S. Department of the Interior, National Park Service, Denali National Park and Preserve. Denali Park, Alaska, USA.

# APPENDIX A SUBSISTENCE - SECTION 810(a) OF ANILCA SUMMARY EVALUATION AND FINDINGS

#### I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluation of potential restrictions to subsistence uses and needs that could result from the National Park Service (NPS) issuing Right of Way Certificates of Access (RWCA) to two tracts of private land in the Stampede Creek area located within the 1980 ANILCA addition in Denali National Park.

# 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 effected 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. Denali National Park and Preserve was created by ANILCA Section 202(3)(a):

"The park additions and preserve shall be managed for the following purposes, among others: To protect and interpret the entire mountain massif, and additional scenic mountain peaks and formations; and to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves,

swans and other waterfowl; and to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities."

"Subsistence uses by local residents shall be permitted in the additions to the park where such uses are traditional in accordance with the provisions in title VIII."

Title I of ANILCA established national parks for the following purposes:

"... to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species of inestimable value to the citizens of Alaska and the Nation, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on free-flowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems.

"... consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this Act, to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so."

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..." (Section 810(a))

# III. PROPOSED ACTION ON FEDERAL LANDS

The NPS proposes to issue RWCA to Mr. Gordon Harrison, a resident of Juneau, Alaska and Mr. Peter Browne, a resident of Washington, to allow surface transportation across NPS lands to access recreational cabin sites near Stampede Creek in the ANILCA addition of Denali National Park.

Under terms and conditions of a permit, the applicants would be allowed to maintain 2,400 feet of the Stampede Airstrip with motorized equipment. In addition upon finding that off-highway vehicles (OHV) use would be compatible with the purposes and values for which the area was established, the NPS would allow the applicants to use small OHVs to travel approximately two and a half miles on a route between the airstrip and the recreational cabin sites. Alternatives 1 and 2 are described in detail in the environmental assessment.

#### IV. AFFECTED ENVIRONMENT

Denali National Park and Preserve is located in the interior and south-central regions of Alaska. Federal subsistence uses within Denali National Park and Preserve are permitted in accordance with ANILCA. Section 202(3)(a) of ANILCA allows local residents to engage in subsistence uses in the ANILCA additions to the park where such uses are traditional in accordance with the provisions in Title VIII. Lands within former Mount McKinley National Park are closed to subsistence uses.

Section 803 of ANILCA defines subsistence uses as: "the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption 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."

In accordance with regulations in 36 CFR Part 13, residents of the NPS designated resident zone communities of Telida, Nikolai, Lake Minchumina, Cantwell, and people who maintain their primary permanent residence inside the boundaries of the park are qualified to engage in Federal subsistence activities in Denali National Park. Local rural residents who do not live in these communities or in the park, but who have customarily and traditionally engaged in subsistence activities within the park may continue to do so with a subsistence use permit issued by the park superintendent. NPS qualified local rural residents are allowed to engage in Federal subsistence activities in Denali National Preserve pursuant to ANILCA Section 203. A regional population of approximately 300 eligible local rural residents qualifies for subsistence use of park resources.

The resident zone communities of Minchumina (population 22) and Telida (population 11) use park and preserve lands for trapping and occasional moose hunting along area rivers. Nikolai (population 122) is a growing community and has used park resources in the past. Cantwell (population 147) has a resident population that actively engages in subsistence activities such as moose and caribou hunting, trapping, and harvest firewood in the ANILCA additions of the park.

Resources utilized by NPS qualified subsistence users in Denali National Park and Preserve include caribou, moose, brown and black bears, beaver, snowshoe hare, fox, lynx, mink, wolf, wolverine, ptarmigan, waterfowl, salmon, trout, grayling, pike, berries, wild edible plants, plant materials and wood.

The main subsistence species, by edible weight, are moose, caribou, furbearers, and fish. Varieties of subsistence fish include coho, king, pink and sockeye salmon. Burbot, dolly varden, grayling, lake trout, northern pike, rainbow trout and whitefish are also among the variety of fish used by local people. Beaver, coyote, land otter, weasel, lynx, marten, mink, muskrat, red fox, wolf and wolverine are important furbearer resources. Rock and willow ptarmigan, grouse, ducks and geese are important subsistence species.

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 any given year many vary considerably from previous years because of such factors as weather, migration patterns and natural population cycles.

# 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 that could be impacted.

The evaluation criteria are:

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

# The potential to reduce populations:

Provisions of ANILCA, and Federal and State regulations provide protection for fish and wildlife populations within Denali National Park and Preserve.

Alternative 1 (No Action) – The two applicants would continue to fly to the Stampede Airstrip and ski or walk to their land 2 1/2 miles upstream on the old mining road that leads to the Stampede Mine area. They would likely trim and cut vegetation to maintain the Stampede Airstrip at its present cleared length of 1,900 feet.

Continuing to use and maintain the Stampede Airstrip and use and maintain the former mine road up Stampede Creek would have a minor impact on wildlife habitat. Maintaining the status quo would not significantly reduce or redistribute populations of fish and wildlife used for subsistence or result in a significant loss of habitat.

<u>Alternative 2 (Proposed Action)</u> - Expanding the area brushed on the formerly longer Stampede Airstrip by 0.8 acres would have a minor impact on wildlife habitat and would likely have a negligible impact on subsistence resources.

The proposed action should not significantly affect wildlife populations. The proposed action is not expected to significantly affect subsistence habitats or result in any measurable reduction in or redistribution of wildlife or other subsistence resources. No change in the availability of subsistence resources is anticipated as a result of the implementation of this proposed action. Provisions of ANILCA and Federal and State regulations provide protection for fish and wildlife populations within in Denali National Park and Preserve.

# **Restriction of Access:**

<u>Alternative 1 (No Action)</u> - Maintaining the status quo would not significantly limit or restrict access to subsistence resources in Denali National Park and Preserve.

<u>Alternative 2 (Proposed Action)</u> - The proposed action will not limit or restrict the access of subsistence users to natural resources within the park or preserve. Federal and State regulations assure the continued viability of fish and wildlife populations.

# **Increase in Competition:**

<u>Alternative 1 (No Action Alternative)</u> - This alternative should not produce any increase in competition for resources to subsistence users. The applicants are not eligible to engage in title VIII subsistence uses in the Denali National Park and Preserve. Maintaining the status quo would not result in increased competition for fish, wildlife or other resources that would significantly impact subsistence users in Denali National Park and Preserve.

<u>Alternative 2 (Proposed Action)</u> - This alternative should not produce any increase in competition for resources to subsistence users. The proposed action would not result in increased competition for fish, wildlife or other resources that would significantly impact subsistence users in Denali National Park and Preserve.

#### VI. AVAILABILITY OF OTHER LANDS

Local residents have access to other Federal, public lands within the region, and the proposed action would not prevent any known current or future subsistence use. The preferred alternative is consistent with the mandates of ANILCA, including Title VIII, and the NPS Organic Act.

# VII. ALTERNATIVES CONSIDERED

Alternatives considered during this analysis focused on lands within Denali National Park and Preserve. Subsistence users utilize other Federal public lands within the region.

# VIII. FINDINGS

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