National Park Service U.S. Department of the Interior



Wrangell-St. Elias National Park and Preserve Alaska

Devils Mountain Lodge Airstrip Extensions Environmental Assessment March 2012

PUBLIC REVIEW



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ACRONYMS AND ABBREVIATIONS

ADF&G	Alaska Department of Fish & Game
ADNR	Alaska Department of Natural Resources
ADOT	Alaska Department of Transportation and Public Facilities
ANILCA	Alaska National Interest Lands Conservation Act
AKEPIC	Alaska Exotic Plant Information Clearinghouse
APE	Area of Potential Effect
CFR	Code of Federal Regulations
CUA	Commercial Use Authorization
EA	Environmental Assessment
EFH	Ellis Family Homestead
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
GA	general aviation
GMP	General Management Plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
RFFA	reasonably foreseeable future action
REA	Runway Extension Area
RWCA	ANILCA Section 1110(b) Right-of-Way Certificate of Access
T&E	threatened and endangered
the park	Wrangell-St. Elias National Park and Preserve
US	United States
USDOI	United States Department of the Interior
VCA	Vegetation Control Area
WRST	Wrangell-St. Elias National Park & Preserve

1.0 INTRODUCTION

1.1 Purpose and Need for Action

The National Park Service (NPS) is considering an SF-299 application filed by Kirk Ellis, acting as representative for the Ellis Family Homestead (EFH), to enlarge the family's privately-owned Devils Mountain Lodge Airstrip by extending each end onto adjacent park lands. These extensions would constitute new access facilities.

The EFH is comprised of U.S. Survey No. 5535, a 40-acre parcel wholly surrounded by Wrangell-St. Elias National Preserve. The property is situated at the end of the state-maintained portion of the Nabesna Road, approximately two miles north of the historic Nabesna Gold Mine (see Figure 1). The airstrip is depicted on the homestead's 1968 U.S. Survey and listed as "Devils Mountain Lodge" and as PABN in aircraft supplements.

Bill Ellis, who purchased the homestead from Harry Boyden in the late 1950s, landed his plane on a nearby section of the Nabesna Road for several years before constructing the Devils Mountain Lodge Airstrip on private lands about 1965. His family has used and maintained the airstrip ever since.

The EFH, which currently serves as a base for commercial air services and hunting concessions operated by Ellis family members, lacks sufficient space to construct a longer airstrip. The existing airstrip is too short and has obstacles at both ends. Safe use of the existing airstrip requires an unusually steep angle of ascent, which affects loading and limits cargo weights. Such conditions are problematic because they limit normal operations and pose unnecessary risks. Only certain types of aircraft can operate within the required parameters, so the current airstrip is generally restricted to small high-performance aircraft.

The applicant states that the project benefits would:

- Improve the margin of safety for aircraft operations based out of the Devils Mountain Lodge Airstrip. The current airstrip is only suitable for small bush planes, flown by pilots skilled in off-airport landings. Extending the length of the runway and removing vegetation from its ends would greatly improve its safety.
- Enhance the ability to operate larger aircraft, allowing the transport of more people into the backcountry for backpacking or flightseeing. The Ellis family's clientele has shifted over the years from nearly exclusively hunters to more general recreational users interested in flightseeing, rafting, climbing, and backpacking, which often require transporting larger groups of people. The largest aircraft the Ellis family can currently operate off the Devils Mountain Lodge Airstrip will only transport two people, so moving larger groups is both time consuming and expensive. Having a longer and safer airstrip would allow the Ellis family to modify their air fleet to provide a broader range of services.
- Permit the NPS, the State and other organizations to base some critical flight operations on the Devils Mountain Lodge Airstrip. The Devils Mountain Lodge Airstrip is uniquely situated within the park, and the Ellis family has often permitted the NPS and other government agencies to stage some of its law enforcement patrols, wildlife management surveys, and search and rescue operations there. However, the existing airstrip is short and can be dangerous. The proposed runway extensions would improve safety for agency-based operations and potentially facilitate the use of larger aircraft.

ANILCA 1110(b) states that landowners will be provided "such rights as may be necessary to assure adequate and feasible access for economic and other purposes to the concerned land by such . . . private owner or occupier and their successor in interest," while also stating that such rights would be subject "to reasonable regulations issued by the Secretary to protect the natural and other values of such lands." This action fulfills that requirement.

The NPS proposes to utilize the July 2007 "Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska" and employ the criteria and processes articulated in Wrangell-St. Elias National Park and Preserve's (WRST) 2008 "Established and Maintainable Access to Inholdings Programmatic Plan and Environmental Assessment" to analyze and issue the Ellis family an Alaska National Interest Lands Conservation Act (ANILCA), Section 1110(b) Right-of-Way Certificate of Access (RWCA) for the resulting airstrip extensions.

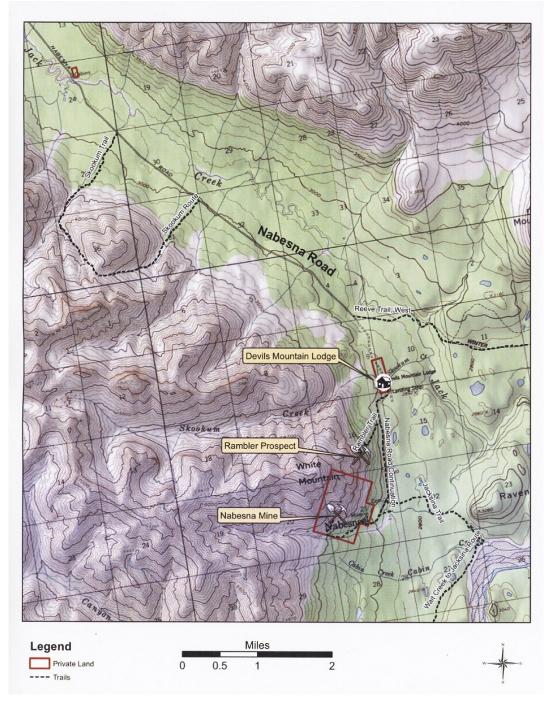


Figure 1: General Project Area

<u>1.2</u> Park Purpose and Significance

President Jimmy Carter established Wrangell-St. Elias National Monument by executive order in 1978. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) designated Wrangell-St. Elias National Monument and the adjoining Kluane National Park in Canada as a World Heritage Site on October 26, 1979, because of their significant historic and cultural landscapes. Congress expanded the monument in 1980, designating the enlarged area as Wrangell-St. Elias National Park and Preserve (WRST) under the Alaska National Interest Lands Conservation Act (ANILCA). WRST encompasses approximately 13.2 million acres, a significant portion of Alaska's south central region (Bleakley 2002).

ANILCA Section 201(a), states that the park/preserve will be managed for the following *purposes*, among others:

to maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall's sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals; 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 park, where such uses are traditional in accordance with the provisions of title VIII.

The following is a list of the *significant resources* for which the park/preserve was established:

Sensitive Habitats

- Caribou calving areas
- Moose winter concentration and rutting areas
- Bear intensive use areas
- Dall's sheep high-density range
- Mountain goat concentrations
- Trumpeter swan nesting areas
- Eagle nesting concentrations
- Fish spawning areas
- Special vegetation areas
- Migratory bird flyways

Cultural Resources

- Historical sites
- Archeological areas

1.3 Laws, Regulations, and Policies

1.3.1. NPS Organic Act and General Authorities Act

Special Geological/Hydrological Features

- Unique glaciers and icefields
- High mountain terrain
- Major clearwater streams
- Glacier-dammed lakes with periodic flood outbursts
- Thermal features (e.g., Mt. Wrangell, mud volcanoes, and hot springs)
- Areas of geological interest (Chitistone and Nizina canyons)
- Sand dunes

Other Significant Resource Values

- Scenic beauty and quality
- Wilderness
- Wildlife
- Coastal Areas

The NPS Organic Act of 1916 directed the Secretary of the Interior and the NPS to manage national parks and monuments 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 United States Code [USC] 1).

The NPS Organic Act also granted the Secretary of the Interior the authority to implement "rules and regulations as he may deem necessary or proper for the use and management of the parks, monuments, and reservations under the jurisdiction of the National Park Service" (16 USC 3).

The General Authorities Act of 1970 and amendments passed in 1978 to the NPS Organic Act expressly articulated the role of the national park system in ecosystem protection. The amendments further reinforce the primary mandate of preservation by stating:

The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided for by Congress (16 USC 1-a1).

Further, the NPS Organic Act and General Authorities Act prohibit the 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 NPS Organic Act's fundamental purpose and any additional purposes as stated in the park's enabling legislation. The park resources and values are intended to be managed so that they continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

1.3.2 Alaska National Interests Lands Conservation Act (ANILCA)

ANILCA Section 1110(b) guarantees that a

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 private land owner. Such rights shall be subject to reasonable regulations issued by the Secretary to protect the natural and other values of such lands.

1.3.3. NPS Management Policies

Section 1.4 of the NPS Management Policies represents the agency's interpretation of the NPS Organic Act and the NPS General Authorities Act. Besides determining the environmental consequences of implementing the preferred and other alternatives, Section 1.4 requires analysis of potential effects to determine whether or not proposed actions would impair a park's resources and values.

The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park. That discretion is limited by the statutory requirement that the National Park Service must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

A prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values (NPS *Management Policies 2006*). Whether an impact meets this definition depends on the particular resources that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

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

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values which cannot be further mitigated.

Impairment may result from visitor activities, NPS administrative activities, or activities undertaken by concessioners, contractors, and others operating within the park. Impairment may also result from sources or activities located outside the park.

1.3.4. An Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska

This interim guide is used by the National Park Service to issue ANILCA 1110(b) RWCAs. Owners of non-federal lands and valid occupancies that lie within units of the National Park System in Alaska were granted the right of adequate and feasible access to their lands by Section 1110(b) of the Alaska National Interest Lands Conservation Act (ANILCA).

As the stewards of America's National Park System, the National Park Service has responsibilities to manage public land in ways that protect the values Congress recognized in establishing these parks, monuments, and preserves. The National Park Service also has the responsibility to faithfully implement Section 1110(b) by working with the owners and valid occupiers of non-federal lands that lie within National Park System units in Alaska, to see that they obtain the access rights they need to use and enjoy their lands.

1.3.5. Park Aviation

Air access within Alaska national parks was also addressed by ANILCA. Section 1110(a), for example, required the Secretary to permit the use of airplanes for travel to and from home sites. However, such use remained subject to reasonable regulations to protect the natural and other values of the conservation system unit.

Air access is also addressed in WRST's 1986 General Management Plan (GMP). It promised that the superintendent would

inventory landing strips within the unit and designate, after public notice and opportunity to comment, those strips when maintenance is necessary and appropriate for continued safe public use of the area. . . . The superintendent may permit on a case-by-case basis the use of mechanized equipment for maintenance. In determining whether to authorize such maintenance, the superintendent will consider: (1) whether the proposed maintenance constitutes expansion of

the landing strip; (2) any adverse impacts on natural or other values of the park/preserve that would result from the proposed maintenance activity. (3) whether the maintenance is needed for public safety in support of an authorized activity; and (4) whether adequate and feasible access otherwise exists.

The GMP also stipulated that construction of new landing strips on federal lands might be permitted "for access to inholdings pursuant to 43 CFR 36.10."

Section 8.4 of the NPS Management Policies addressed general aviation. Noting that a variety of aircraft utilize park airspace, it promised that the service would work "to ensure that authorized aviation activities affecting units of the national park system occur in a safe and appropriate manner, with minimal impact on park resources and visitor experiences."

In addition, Section 8.4.1 of the NPS Management Policies noted that

aviation can provide an important, and in some cases the preferred, means of access to remote areas in certain parks, especially in Alaska. In such cases, access by aircraft may make an important contribution to the protection and enjoyment of those areas. Dependence on aviation will be fully considered and addressed in the planning process for those parks.

1.4 Relationship of Proposal to Other Planning Projects

1.4.1 Nabesna Road Scenic Corridor Plan

The Nabesna Road provides access to private property while supplying local visitors with the opportunity to experience life in rural Alaska. In order to preserve this experience, the National Park Service, the Alaska Department of Natural Resources, and the Alaska Department of Transportation and Public Facilities undertook an inter-agency planning effort in 2002 to develop a Nabesna Road Scenic Corridor Plan. The four objectives of this plan included:

- Preserving the rugged character of the Nabesna Road for future public use and enjoyment, and enhancing views of scenic and natural resources along the road and corridor;
- Improving the safety of the road;
- Providing access to national park and private lands via trails, interpretive sites, and proposing related visitor facilities along the road; and,
- Preserving and protecting the natural, cultural, and scenic resources of the area.

Although funding for this effort was withdrawn before the plan was completed, an advanced draft did describe the route's existing conditions and develop some recommendations, including future road improvement projects, scenic corridor treatments, waysides, end-of-road options, material and disposal sites, and maintenance issues. Those recommended improvements have been incorporated into the reasonably foreseeable future actions (RFFAs) addressed by this EA.

1.4.2 Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska

Owners of non-federal lands and valid occupancies that lie within units of the National Park System in Alaska were granted the right of adequate and feasible access to their lands by Section 1110(b) of the Alaska National Interest Lands Conservation Act (ANILCA).

As the stewards of America's National Park System, the National Park Service has responsibilities to manage public land in ways that protect the values Congress recognized in establishing these parks, monuments, and preserves. The National Park Service also has the responsibility to faithfully implement Section 1110(b) by working with the owners and valid occupiers of non-federal lands that lie within National Park System units in Alaska to ensure that they obtain the access rights they need to use and enjoy their lands.

The Alaska Region NPS prepared an "An Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska to authorize access to private property located within WRST under ANILCA Section 1110(b). Issuing ANILCA 1110(b) Right-of-Way Certificates of Access (RWCA) to private property owners grants the rights authorized by Section 1110(b) and specifies the methods and means of access

Upon completion of this EA and a finding of no significant impact, the NPS would issue the Ellis family ANILCA Section 1110(b) RWCAs. Once constructed, the two proposed extensions to the Devils Mountain Lodge Airstrip would constitute established and maintainable access facilities.

1.5 Specific Issues

To focus this EA, specific issues were selected for further analysis and others were eliminated from such evaluation. The issues selected or dismissed were determined through internal scoping among NPS park and regional staff. The issues are evaluated in Section 4.0, Environmental Consequences.

1.5.1 Issues Selected for Detailed Analysis

Visual Resources

The NPS seeks to maintain the undeveloped character of large sections of WRST. This action's clearing and facility construction would alter the park's aerial and terrestrial views.

Vegetation

The NPS seeks to maintain the park's natural vegetation. This action's construction activities would alter and diminish existing vegetation. In addition, invasive plants could colonize disturbed soils.

Soils

The NPS seeks to maintain the park's natural soils. Construction activities associated with this action would alter and diminish the existing soil strata.

Wildlife

The NPS seeks to preserve the park's wildlife and their habitat. Extension of the existing Devils Mountain Lodge Airstrip facility would reduce wildlife habitat and the construction and maintenance of the extensions would temporarily disturb wildlife.

Visitor Services

The NPS seeks to encourage and improve visitor services. There are presently few commercial flight services available on the Nabesna Road. Improving the facilities at Devils Mountain would increase such opportunities.

Visitor Experience

The NPS seeks to enhance visitor experience. Enhanced flight services at Devils Mountain would make portions of the park more accessible for backcountry hiking, camping, flightseeing, and other recreational opportunities, enhancing the experience of some visitors.

Economic Environment

The NPS seeks to enhance the economic environment. Enhanced flight operations at Devils Mountain would alter the local economic environment, providing additional opportunities to businesses located within or near the project area.

Safety

The NPS seeks to enhance park safety. Improving the airstrip at Devils Mountain would enhance the safety of local residents, visitors, park staff, and emergency responders by providing a safer facility from which to stage routine and emergency operations.

Park Operations

The NPS seeks to improve park operations. There is presently no airstrip located on park lands or suitable for park use within the Nabesna Road corridor. Enhancing the flight facilities at Devils Mountain would improve the speed, efficiency and safety of NPS contracted flights, thereby enhancing park operations.

1.5.2 Issues Dismissed from Further Analysis

NEPA regulations emphasize the importance of adjusting the scope of each EA to the details of the project and its setting, and focusing on the specific potential impacts of the project. The following issues were considered but dismissed from detailed analysis and are therefore not addressed further in this EA.

Cultural Resources

Consideration of impacts to cultural resources is required under the National Historic Preservation Act (NHPA) of 1966 and the National Environmental Policy Act of 1969 (NEPA). Although WRST contains cultural features in virtually every area where humans have lived for any sustained period of time, an archaeological survey conducted in 2011 by the park's cultural resource staff found no historic properties affected within this undertaking's area of potential effect (APE). For WRST's complete NHPA Section 106 Finding, see Appendix B.

Subsistence

Effects on subsistence were dismissed from further analysis because the ANILCA §810(a) Summary Evaluation and Finding concluded that Alternative 2 (the Proposed Action) would not result in any restriction of subsistence uses in the project area. For the complete report, see Appendix A.

Wetlands

E.O. 11990, *Protection of Wetlands*, requires all federal agencies to minimize the destruction, loss, or degradation of wetlands; and preserve and enhance the natural beneficial values of wetlands in the conduct of the agency's responsibilities for: 1) acquiring, managing, and disposing of federal lands and facilities; 2) providing federally undertaken, financed, or assisted construction and improvements; and 3) conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. WRST natural resource staff surveyed the project area in 2011 and found no wetlands within the proposed action's APE. Therefore, this EA does not address E.O. 11990, *Wetlands Protection*.

Threatened and Endangered Species

The Endangered Species Act requires an analysis of impacts on all federally listed, threatened, and endangered (T&E) species, as well as species of special concern listed by the State of Alaska. As no T&E species have been recorded in WRST's Nabesna District, no Endangered Species Act §7 consultation with the U.S. Fish and Wildlife Service (USFWS) is required.

Climate Change

Secretarial Order 3226 directs federal agencies to ensure that climate change impacts are considered in connection with departmental planning and decision making. The 2006 NPS Management Policies direct the operation and management of facilities, vehicles, and equipment in a manner that minimizes the consumption of energy, water, and nonrenewable fuels. As the construction, operation, and maintenance

of the proposed airstrip extension facilities would have no measurable effect on climate change, this topic was dismissed from further analysis.

Environmental Justice

Executive Order (E.O.) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. As this project would not result in changes to human health or the environment with disproportionately high and adverse effects on minority or lowincome populations or communities, this topic was dismissed from further analysis.

<u>1.6</u> Permits and Approvals Needed to Implement the Project

A decision by the National Park Service to issue a right-of-way certificate of access (RWCA) is a federal action, requiring compliance with all federal statues and executive orders and requiring federal agencies to review and assess their action for its potential to affect the natural and cultural environments. These statutes include, but are not limited to, the National Environmental Policy Act (PL 91-190), the Endangered Species Act (PL 93-205), the National Historic Preservation Act (PL 89-665), the Clean Air Act (PL 91-604), and the Clean Water Act (PL 92-500). Before an operation can be approved, the operator must obtain any permits required by these statutes. Concerning water-related regulatory requirement, operators are required to comply with the U.S. Army Corps of Engineers program and other related regulatory requirement administered by the EPA and other agencies.

Approximately 0.75 acres of the project area is situation within the Nabesna Road ROW. Any construction, maintenance and/or aviation operations which would be undertaken within the Nabesna Road ROW must be coordinated with and satisfy the standards of the ADOT.

2.0 ALTERNATIVES

This chapter includes a description of the no action and action alternatives. The Proposed Action and alternatives were developed through discussions between the Ellis Family and the NPS, in concurrence with the programs and goals outlined in WRST's 1986 GMP. The process considered regional and WRST staff recommendations to management. Numerous internal staff discussions led to the project elements proposed and the concepts considered.

2.1 Alternative 1: No Action Alternative

Under Alternative 1, the NPS would not issue the Ellis family the RWCAs necessary to extend the private Devils Mountain Lodge Airstrip onto park lands. No facilities would be removed, modified, or constructed. Existing safety needs would not be addressed and would likely worsen over time as demand for the area's limited commercial aircraft services increases. This alternative represents a continuation of the existing condition and provides a baseline for evaluating the changes and impacts of the action alternative.

2.2 Alternative 2: Devils Mountain Lodge Airstrip Extensions (Proposed Action)

Under Alternative 2, the NPS would issue the Ellis Family the RWCAs necessary to extend its existing privately-owned Devils Mountain Lodge Airstrip at each end onto adjacent park lands.

The proposed improvements would include two constructed extensions to the Devils Mountain Lodge Airstrip, with one situated on park lands at each end and abutting the northern and southern boundaries of the EFH (see Figures 2, 3 and 4). These facilities would each be rectangular in shape and measure 600 feet long by 300 feet wide. Each would contain approximately 4.13 acres, with the pair totaling 8.26 acres. All of the proposed construction and maintenance activities analyzed by this environmental assessment (EA) would be confined to the EFH and these two new airstrip extension facilities.

Each airstrip extension facility would include two distinct components:

The inner area, referred to here as the Runway Extension Area (REA), is a 500-foot-long by 100-footwide threshold and overrun core adjoining the existing runway surface and containing approximately 1.15 acres. Cleared of all vegetation and leveled, the REA would be cleared of obstacles that might impede flight or aircraft traveling on the ground. Construction of the REA would consist of a cut, fill, and leveling operation undertaken by a bulldozer and/or grader, and its surface would consist of soil and gravel. The material in the REA would be redistributed, and none would be imported from offsite. Although some low vegetation would be allowed to recolonize the bladed area naturally, no reseeding is proposed or would be permitted. Threshold areas, which are constructed to remove obstacles in the runway approach that make the beginning section of the runway unsuitable for landings, are generally used for taxiing, takeoff and landing rollouts, but not specifically for touchdowns. Overrun areas are located at the end of the runway and are used as an emergency space where pilots can slowly stop planes that have overrun the runway or aborted a takeoff. The REAs' primary purpose would be to enhance safety.

The outer area, known as the Vegetation Control Area (VCA), would consist of a 100-foot-wide envelope adjoining and surrounding the three disconnected sides of the REA and employed to prevent vegetation from growing high enough to impede or endanger flight operations. The vegetation in each 2.98-acre VCA would be cropped near ground level, but the area would not be bladed or graded except where needed to prevent its surface from sloughing onto the adjacent REA. Like the REAs, the VCAs' primary purpose would be to enhance safety.

The REA would be situated to the east of the existing Alaska Department of Transportation (ADOT) maintained Nabesna Roadbed, and a portion of the VCA would overlap with a small portion (about 0.76 acre) of the currently unmaintained road right-of way (ROW) along the southern boundary of the EFH

(see Figure 4). The landowners would coordinate any construction, maintenance, and aviation operations within the Nabesna Road ROW with the ADOT.

Extra soil from the REAs would be placed in the VCAs. Vegetation removed from the REAs or the VCAs would be used as fill or removed from the project area and burned. The Ellis family plans to stage all work from their private property and would not require any staging area on park lands.

The construction phase of the project is planned to begin after the NPS issues the Ellis family an ANILCA Section 1110(b) RWCA in late spring or early summer 2012, and is not expected to require more than 14 days.

Runway identifiers (the letters P and X made of wooden 2-inch by 4-inch timbers) would be laid flat and located on each REA.

All aviation support ground operations such as fuel storage, refueling, parking, loading, and aircraft maintenance would remain confined to private property, as is presently the case.

These airstrip extension facilities would be needed for the foreseeable future.

Facility Maintenance

Once constructed, the REAs would require regular maintenance, including periodic grading and/or blading.

The VCAs would be monitored and maintained to prevent any vegetation from growing tall enough to endanger flight operations, and would appear similar to the brushed areas that parallel the nearby surface of the Nabesna Road. If shrubs, brush, saplings and/or trees start to pose a potential risk, they would be cropped or removed using hand tools or motorized equipment such as hand saws, chain saws, weedwackers, and/or brush cutters. Cleared vegetation would be transported to the Ellis property for disposal.

2.3 Environmentally Preferable Alternative

In accordance with Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS 2001), the National Park Service is required to identify the environmentally preferable alternative in all environmental documents. The environmentally preferable alternative is "the alternative that causes the least damage to the biological and physical environment; it also means that the alternative that best protects, preserves, and enhances historic, cultural, and natural resources."

The environmentally preferable alternative is the No Action Alternative since it causes the least amount of damage to the biological and physical environment.

2.4 Mitigation Measures

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

2.4.1 Visitor Experience

Those clearing and constructing the Devils Mountain Lodge Airstrip Extensions must minimize its effect on visitor use of park areas. The facilities must be built as quickly as possible during non-peak visitor travel seasons (i.e., during week days, avoiding holiday weekends).

2.4.2 Wildlife

Destruction of active bird nests, eggs, or nestlings can result from spring and summer vegetation clearing, grubbing, and other site preparation and construction activities . Construction activities must be timed to

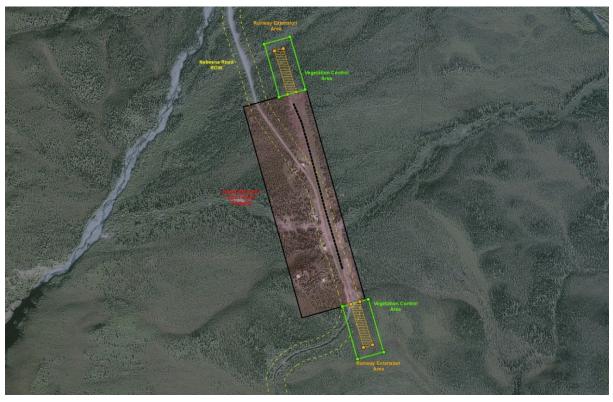


Figure 2: Proposed Devils Mountain Lodge Airstrip Extensions



Figure 3: Detail of Northern Extension Area



Figure 4: Detail of Southern Extension Area

avoid disturbing nesting birds. The recommended time period for avoiding vegetation clearing in this region is May 1 to July 15.

2.4.3 Soils

The proposed action must be completed during the summer months when the soil moisture is less than 20 percent and stumps are not frozen into the substrate. Erosion controls must be maintained during construction. Exposed soil or fill material must be stabilized at the earliest possible time. Construction should not be conducted when soils are saturated, such as during or immediately following rain events. Any direct impact to soils on park lands must remain confined to the REAs.

2.4.4 Vegetation

Vegetation may only be removed or altered on the airstrip extension facilities, and no additional park lands may be impacted. The permittee would utilize machinery that is already on site to minimize the potential of importing exotic plants. WRST will conduct regular surveys of the Devils Mountain Lodge Airstrip as part of its existing exotic plant monitoring program in order to limit the spread of invasive plants.

2.4.5 Hazardous Materials/Spill Prevention

Those clearing and constructing the Devils Mountain Airstrip Extensions must be prepared to prevent or control accidental spills of oils, lubricants, and other chemicals from contaminating parklands. An emergency spill kit, containing absorbent material, shovel or rake, and other clean-up items, must be

readily available on-site in the event of an accidental spill. No refueling, fuel storage, or aircraft maintenance will be permitted on park lands.

2.4.6 Nabesna Road Right-of Way

For that portion of the RWCA (0.75 acres) which overlaps with the Nabesna Road ROW, the landowner must ensure that any construction, maintenance and/or aviation operations would be coordinated with the Alaska Department of Transportation and Public Facilities and meet their approval standards.

Impact Topic	Alternative 1 – No Action Alternative	Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)	
Visual Resources	No change to visual resources.	Alternative 2 would result in direct, medium intensity and long-term negative impacts to contextually-important visual resources. However, its overall effect would be minor, because its contribution is minimal in terms of the park's total visual resources and proximity to existing development.	
Vegetation	No change to vegetation.	Alternative 2 would result in direct, high intensity and long-term negative impacts to contextually-common vegetation. However, its overall effect would be minor, because its contribution is minimal in terms of the total park vegetation and those areas already impacted by previous activities and operations within the Nabesna Road corridor.	
Soils	No change to soils.	Alternative 2 would result in direct and indirect, medium intensity and long-term negative impacts to contextually-common soils. However, its overall effect would be minor, because its contribution is minimal in terms of the total park soils and those areas already impacted by previous activities and operations within the Nabesna Road corridor.	
Wildlife	No change to wildlife.	Alternative 2 would result in direct, low intensity and long-term negative impacts to contextually-important wildlife. However, its overall effect would be low, because its contribution is minimal in terms of total park wildlife populations.	
Visitor Services	No change to visitor services.	Alternative 2 would result in direct, medium intensity and long-term beneficial impacts to contextually-important visitor services. However, its overall effect would be minor, because its contribution is minimal in terms of visitor services throughout the park.	
Visitor Experience	No change to visitor experiences.	Alternative 2 would result in direct and indirect, long-term, medium beneficial and negative impacts on contextually- important visitor experience. However, this action's overall effect would be low, because its contribution is negligible in terms of visitor experience throughout the park.	
Economic Environment	No change in the economic environment.	Alternative 2 would result in direct, long-term, low intensity, beneficial impacts on a contextually-common resource. Opportunities for Ellis family's two hunting concessions and air taxi business would be enhanced. However, its overall effect would be low, because its contribution is negligible in terms of the total park economy.	
Safety	No change to safety.	Alternative 2 would result in direct, long-term, medium intensity, beneficial impacts on a contextually-common resource. However, its overall effect would be minor, because its contribution is negligible in terms of total park safety.	
Park Operations	Service would continue to decline as	Alternative 2 would result in direct, long-term, medium intensity,	

Table 1: Comparison of Alternatives

Impact Topic	Alternative 1 – No Action Alternative	Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)
	demand increased.	beneficial impacts on a contextually-common resource. Park Service field operations and logistics would benefit and be less costly. However, this action's overall effect would be low, because its contribution is negligible in terms of the total park operations.

Note: Refer to Chapter 4 of this document for a more detailed analysis.

3.0 AFFECTED ENVIRONMENT

3.1 Project Area

The Ellis Family Homestead is located west of the Nabesna River near the terminus of the historic Nabesna Road at an elevation of approximately 2,900 feet. Devils Mountain Lodge and the associated private airstrip are constructed on an inactive portion of an alluvial fan along the right (south) bank of Skookum Creek at the base of White Mountain. Vegetation in the area is classified as Closed White Spruce Forest, dominated by white spruce but intermixed with willow and alder riparian zones and disturbed areas.

3.2 Resource Impact Topics

This section describes the affected environment for resource impact topics potentially impacted by the proposed action.

3.2.1 Visual Resources

Past and present actions that have impacted and continue to affect visual resources in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field and Skookum Volcano Trails; the development of the Ellis Family Homestead, which included some blading and clearing on park lands, impacting visual resources along its southern boundary; and the development of other nearby private property. These actions have introduced some colors and forms that starkly contrast with the natural environment.

Apart from the impacts resulting from these prior actions, this area's visual landscape includes expansive mountain vistas, undulating hills, valleys, lakes, and streams.

3.2.2 Vegetation

Past and present actions that have impacted and continue to affect vegetation in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field Trail; the development of the Ellis Family Homestead, which included some blading and clearing on park lands, affecting vegetation along its southern boundary; and the development of other nearby private property. These actions resulted in a direct loss of vegetation and encouraged the spread of exotic weeds.

No threatened and endangered plants have been documented on or near the Devils Mountain Lodge Airstrip. The airstrip itself is very dry and the site contains no classifiable wetland habitat. Currently, six invasive species have been documented on the existing airstrip with three of them being of high concern (with an invasiveness ranking of over 40 by AKEPIC: *Hordeum jubatum, Plantago major,* and *Taraxacum officinale, Appendix A*).

Classifications of vegetation are based on Vierck et al. 1992. On the northern extension the the vegetation of a quarter of the REA has signs of previous human disturbance (that closest to the airstrip). This area is primarily closed canopy alder (*Alnus crispa*). The rest of the RES/ VCA is mixed spruce (*Picea glauca*)-alder (*Alnus crispa*) closed canopy. The spruce is mainly white spruce (*Picea glauca*) with some black (*Picea mariana*). The far north-western corner is old flood plain with closed canopy alder (*Alnus crispa*) again. On the southern extension the vegetation in the RES/ VCA is open mixed black spruce (*Picea glauca*), Alder (*Alnus crispa*). Other species at this site include White spruce (*Picea glauca*), Alder (*Alnus crispa*), Willow (*Salix spp.*) species, and *Spahgnum* moss species. These areas represent but a small area covered by these vegetation classifications in the local area (Terwilliger 2011).

3.2.3 Soils

Past and present actions that have impacted and continue to affect soils in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field and Skookum Volcano Trails; the development of the Ellis Family Homestead, which included some blading and clearing on park lands, affecting soils along its southern boundary; and the development of other nearby private property. These actions resulted in a loss of cover, increased soil compaction, and erosion.

Surface soils in the project area are classified primarily as alluvial deposits and are generally well-drained and permafrost free (Terwilliger 2011).

3.2.4 Wildlife

Past and present actions that have impacted and continue to affect wildlife in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field Trail; the development of the Ellis Family Homestead, which included some blading and clearing on park lands along its southern boundary; and the development of other nearby private property. These construction, operation, and maintenance activities have disturbed wildlife and altered and/or destroyed wildlife habitat.

The Nabesna District contains an abundance of wildlife. Significant populations of brown bears, black bears, moose, caribou, and Dall's sheep all inhabit the general area of the project. Smaller mammals found there include wolves, lynx, wolverine, beaver, marten, porcupine, fox, marmots, river otters, ground squirrels, pikas, and voles (NPS 2010b).

Many birds nest in the area as well, including eagles, falcons, grosbeaks, chickadees, and woodpeckers. Year-round residents include ptarmigan, grouse, ravens, hawks and owls (NPS 2010c). A complete checklist of the park's bird species is available at: <u>http://www.nps.gov/wrst/naturescience/birds.htm</u>.

No threatened or endangered wildlife species have been documented within this action's area of potential effect (Putera 2011).

3.2.5 Visitor Services

Past and present actions that have impacted and continue to affect visitor services in the Nabesna District include the development of the Slana Visitor Information Station, the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1997). Improvements in Nabesna Road maintenance, the development of waysides and interpretive signage within the road corridor, and trail improvements have also occurred. WRST has also developed a Nabesna Road Audio Tour CD. All have aided in directing visitors to accommodations, preparing visitors for backcountry experiences, and fostering an appreciation of the cultural and natural resources for which the park was established.

WRST currently provides no information, orientation, interpretation, or administrative services in the project area, although it does provide year-round emergency response and law enforcement services there in cooperation with other state and municipal entities. The closest NPS facility, a visitor contact station which is operated in the summer, is located in Slana, Alaska, more than 40 miles to the west. However, the Nabesna Road remains an important visitor destination. Visitor activities there include nature walks, backpacking, sight-seeing, wildlife viewing, hunting, fishing, and gathering. The primary source of visitor services within the immediate project area is the EFH.

As described in the 1986 GMP Management Objectives for Visitor Use and Interpretation, WRST is managed to provide unstructured and wilderness-oriented uses while supplying limited opportunities for a broader spectrum of visitors predominantly from May-September. Visitors that travel the Nabesna Road

generally pursue self-initiated activities within or adjacent to the corridor or backcountry wildernessoriented activities accessed by airplane or raft.

Commercial operators provide information to park visitors because of their interest in "providing a quality experience." The NPS issued 53 commercial-use authorizations (CUAs) to businesses providing services in the park for 2011. These permits are granted to private businesses for small-scale commercial activities (NPS 2010a).

The Devils Mountain Lodge and End of the Road Bed and Breakfast provide overnight accommodations, meals, and air taxi services for a variety of recreational activities including sport hunting. Most recently the Devils Mountain Lodge expanded their services to include corporate retreats.

When Congress established WRST, it allowed hunting and trapping there to continue. The NPS and the Alaska Department of Fish and Game (ADF&G) cooperatively manage the park's wildlife resources. While subsistence hunting is permitted in both the National Park and Preserve, recreational hunting is only authorized within the National Preserve. Twelve registered hunting guides operate under NPS Concession Contracts within the Preserve. Two concessioners, Cole and Kirk Ellis, are headquartered within the project area on the EFH (Keogh 2011).

3.2.6 Visitor Experience

Past and present actions that have impacted and continue to affect visitor experience in WRST's Nabesna District include the development of the Slana Visitor Information Station, the development of the Kendesnii (Twin Lakes) Campground (NPS 2004), and the construction and maintenance of the Reeve Field and Skookum Volcano Trails (NPS 1997). An improvement of Nabesna Road maintenance, the development of waysides, installation of interpretive signage within the Nabesna Road corridor, and trail improvements have also occurred. WRST has also developed a Nabesna Road Audio Tour CD. These have aided in directing visitors to accommodations, preparing visitors for backcountry experiences, and fostering an appreciation of the cultural and natural resources for which the park was established.

WRST presently provides no information, orientation, interpretation, or administrative services within the immediate project area. Visitor experience is largely self-directed or provided by commercial operators. Most visitors use private vehicles to travel the Nabesna Road, which serves a convenient entry point and means from which to experience the northern portion of the park. The project area also serves as a hub for visitors wishing to charter commercial aircraft to reach other remote locations.

3.2.7 Economic Environment

Past and present actions that have impacted and continue to affect the economic environment of the Nabesna District include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000), the construction and maintenance of the Nabesna Road, and the development of local businesses on private lands. The NPS constructed the Slana Visitor Information Station, the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1997), and installed waysides and interpretive signage within the Nabesna Road corridor. These have enhanced the local economy by providing employment or helping direct visitors to commercial outfitters, food, and accommodations.

Economic data for rural Alaska is highly variable due to its vast size, small population, remote location, and the complexity of its economic structure (Goldsmith 2007). While the Alaska Economic Information System, a state-sponsored source of information on local economic indicators, once provided economic descriptions at the census-area level, that effort has now been discontinued. A 1997 issue of *Alaska Economic Trends*, a publication of the Alaska Department of Labor and Workforce Development, contains the only recent analytical description of the Copper River sub-census area's economy. It identifies the Copper River School District as the region's largest employer, the Copper River Native Association, a regional non-profit healthcare organization, as the second-largest employer, and the NPS as

third (Windisch-Cole 1997). Most of the growth in the area's economic environment has occurred in the trade and service sectors, particularly tourism. Cottage industries like lodges, bed and breakfasts, outfitters, and air taxis are typical entrepreneurial activities. Most provide only seasonal employment.

The NPS negotiates CUAs and concessions contracts with outfitters who operate within the park in accordance with ANILCA Section 1307 and PL 89-249 (Concessions Policy Act). Many contribute to the economy of the region. More detail on the number and types of outfitters and guides that are authorized to work within the park is described in Section 3.2.5 Visitor Services.

3.2.8 Safety

Past and present actions that have impacted and continue to affect safety in the greater Nabesna region include the construction and seasonal maintenance of the Nabesna Road and its increased traffic; the area's growing population; the addition of the NPS ranger and visitor information center at Slana; a significant expansion in local cell phone coverage; and a more visible law enforcement presence.

Residents along the Nabesna Road rely almost entirely on volunteers to meet their emergency needs. Medical services, including response, transport, and patient care, are generally provided by Copper River Emergency Medical Services (Copper Valley Electric Association 2010). The community of Slana presently has no medical facilities and all non-emergency medical treatment is deferred to Tok or Glennallen. If an accident occurs along the Nabesna Road in a location with no cell coverage, the typical response time could require up to four hours.

3.2.9 Park Operations

Past and present actions that have impacted and continue to affect park operations in the Nabesna District include the development of the Slana Visitor Information Station, the Betty Freed Research Facility (NPS 2001), the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1978). An improvement of Nabesna Road maintenance, the development of waysides and interpretive signage within the road corridor, and other trail improvements have also occurred.

WRST actively monitors certain natural and cultural resources throughout the Nabesna District, occasionally basing its flight operations from the Devils Mountain Lodge Airstrip. The park also provides interpretive services at its Slana Visitor Center, and emergency response and law enforcement services along the Nabesna Road in cooperation with other federal, state and local entities.

4.0 ENVIRONMENTAL CONSEQUENCES

This section provides an evaluation of the potential effects or impacts of each of the alternatives on the resources described in the issue statements presented in Section 1.6.1, Issues Selected for Detailed Analysis.

4.1 Methodology and Impact Criteria

The direct, indirect, and cumulative impacts are described for each issue (impact topic). The impacts for each issue are based on the intensity (magnitude), duration, and context (extent) of the impact. Summary impact levels (negligible, minor, moderate, or major) are given for each issue. Definitions are provided below.

Intensity

	Low:	A change in a resource condition is perceptible, but it does not noticeably alter the resource's function in the park's ecosystem, cultural context, or visitor experience.
	Medium:	A change in a resource condition is measurable or observable, and an alteration to the resource's function in the park's ecosystem, cultural context, or visitor experience is detectable.
	High:	A change in a resource condition is measurable or observable, and an alteration to the resource's function in the park's ecosystem, cultural context, or visitor experience is clearly and consistently observable.
Duration	<u>1</u>	
	Temporary:	Impacts would last only a single visitor season or for the duration of discreet activity, such as construction of a trail (generally less than two years).
	Long-term:	Impacts would extend from several years up to the life of the project.
	Permanent:	Impacts are a permanent change in the resource that would last beyond the life of the plan even if the actions that caused the impacts were to cease.
<u>Context</u>		
	Common:	The affected resource is not identified in enabling legislation and is not rare either within or outside the park. The portion of the resource affected does not fill a unique role within the park or its region of the park.
	Important:	The affected resource is identified by enabling legislation or is rare either within or outside the park. The portion of the resource affected does not fill a unique role within the park or its region of the park.
	Unique:	The affected resource is identified by enabling legislation and the portion of the resource affected uniquely fills a role within the park or its region of the park.

Overall Summary Impact Levels

Summaries about the overall impacts on the resource synthesize information about context, intensity, and duration, which are weighed against each other to produce a final assessment. While each summary reflects a judgment call about the relative importance of the various factors involved, the following descriptors provide a general guide for how summaries are reached.

Negligible:	Impacts are generally extremely low in intensity (often they cannot be measured or observed), are temporary, and do not affect unique resources.
Minor:	Impacts tend to be low intensity or of short duration, although common resources may have more intense, longer-term impacts.
Moderate:	Impacts can be of any intensity or duration, although common resources are affected by higher intensity, longer impacts while unique resources are affected by medium or low intensity, shorter-duration impacts.
Major:	Impacts are generally medium or high intensity, long-term or permanent in duration, and affect important or unique resources.

Cumulative Impacts

Cumulative impacts are the additive or interactive effects that would result from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR 1508.7). Interactive impacts may be either *countervailing* – where the net cumulative impact is less than the sum of the individual impacts or *synergistic* – where the net cumulative impact is greater than the sum of the individual impacts. Cumulative impacts were assessed by combining the potential environmental impacts of the alternatives with the impacts of projects that have occurred in the past, are currently occurring, or are proposed in the future within the project area.

Recent Past Actions

Recent impacts have been largely associated with the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field and Skookum Volcano Trails; the development of the Ellis Family Homestead, which included some blading and clearing on park lands along its southern boundary; the development of other nearby private property; and increased visitor use.

Many lands along the Nabesna Road were claimed under federal homestead, trade and manufacturing, or Native allotment programs before WRST was established. Some were subsequently subdivided and sold. Private property owners have developed many parcels along the Nabesna Road, and some have obtained RWCAs which define and authorize their access. The proposed project abuts the Devils Mountain Lodge Airstrip, a primary access node serving the northern half of the park.

Many flight paths traverse the Nabesna District. Fixed-wing aircraft are used to reach more accessible sites, but helicopters are sometimes required to access more remote ones. The NPS does not permit the recreational use of helicopters for access, but WRST authorizes about 15 agency or scientific projects a year that require helicopter access within this general area. Fixed-wing aircraft flights remain unregulated.

Reasonably Foreseeable Future Actions (RFFAs)

Kirk Stanley, the owner/operator of the Nabesna Gold Mine, may undertake mineral exploration on his private lands in the future. Such activity can be expected to commence once the mitigation of the historic mill tailings is completed.

The NPS is currently finalizing plans to mitigate acidic mill tailings on park lands located downslope from the Nabesna Mine. The implementation of that project would temporarily increase traffic and activity along the Nabesna Road, which bisects the EFH and parallels the Devils Mountain Lodge Airstrip.

Other RFFAs within the project area include the continued maintenance of and/or improvements to the Nabesna Road, realigning the Reeve Field Trail, the development of a public use cabin at the Rambler Prospect, additional private property development, routine NPS resource monitoring, and the maintenance of existing scientific facilities.

4.2 Analysis of Impacts

The following sections describe the impact associated with the Alternative 1 - No Action and Alternative 2 - Proposed Action alternatives.

4.2.1 Visual Resources

Alternative 1 – No Action Alternative

Under Alternative 1, no airstrip extension facilities would be removed, altered, or constructed, so there would be no change to the visual landscape within the project area.

Cumulative Impacts

Past actions that have impacted visual resources in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field Trail; the development of the Ellis Family Homestead, which included some blading and clearing on park lands along its southern boundary; and the development of other nearby private property. These actions have introduced colors and forms that starkly contrast with the natural environment.

RFFAs that could occur within the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); increased traffic on the Nabesna Road; the further development of private property. All would impact visual resources. However, with no new direct or indirect impacts to visual resources proposed under Alternative 1, there would be no contribution to cumulative impacts on this resource.

Conclusion

Alternative 1 would result in no new impacts on visual resources. However, the existing impacts to visual resources resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)

Alternative 2 would cause direct impacts to visual resources. During the construction period, visual resources in the project area would be altered by the presence of crews, machinery, and associated activities. Once completed, the area's visual resources would be altered by the facilities' removal of vegetation (trees and shrubs) and its disturbed soils. Hand and mechanical maintenance activities would also temporarily affect visual resources.

The construction and maintenance of the airstrip extensions would affect the visual quality and aesthetics at each site, although their total area is small relative to the surrounding landscape, and the dominance of impact would be reduced by their proximity to previously developed private land.

The impacts on visual resources from Alternative 2 would include the addition of the two airstrip extensions, a minor expansion of colors and forms that would starkly contrast with the natural environment. However, considering the small size of the facilities and the limited period required for their construction and maintenance activities, that impact would be minor.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to have minor overall impacts to visual resources in the project area are described under Alternative 1. Alternative 2 would add medium intensity and long-term impacts to contextually-important visual resources.

Conclusion

Alternative 2 would result in direct, medium intensity and long-term negative impacts to contextuallyimportant visual resources. However, its overall effect would be minor, because its contribution is minimal in terms of the park's total visual resources and its proximity to existing development.

4.2.2 Vegetation

Alternative 1 – No Action Alternative

Under Alternative 1, no airstrip extension facilities would be removed, altered, or constructed, so there would be no new direct or indirect impacts to vegetation within the project area.

Cumulative Impacts

Past actions that have impacted vegetation in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field Trail; the development of the Ellis Family Homestead, which included some blading and clearing on park lands along its southern boundary; and the development of other nearby private property. Cumulative impacts associated with these actions include the clearing of vegetation and the introduction of invasive species.

RFFAs that could impact vegetation within the project area further include the development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); the continuing maintenance of and/or improvements to the Nabesna Road; increased traffic on the Nabesna Road; and the further development of private property. These impacts could include the direct loss of vegetation and a potential increase in invasive species. However, with no new direct or indirect impacts to vegetation proposed under Alternative 1, there would be no contribution to cumulative impacts on this resource.

Conclusion

Alternative 1 would result in no new impacts to vegetation. However, the existing impacts to vegetation resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)

Alternative 2 would cause direct and indirect impacts to vegetation. The construction of the two airstrip extensions on park lands would result in the complete loss of approximately 2.3 acres and the alteration of approximately 5.96 acres of regionally-common vegetation. Vegetation would be cleared within the REAs and cropped near ground level within the VCAs. No threatened or endangered species of vegetation would be cleared or altered at either of the sites.

The impacts on vegetation from Alternative 2 would include direct loss of native plant cover and a potential reduction in ecological function, such as wildlife habitat, biomass production or carbon dioxide sequestration. These impacts would be minimized by the mitigation measures described in Section 2.4.

Indirect impacts resulting from this activity include the creation of an area suitable for establishment and propagation of invasive and exotic plant species. Some trampling of surrounding vegetation could also occur during construction and maintenance due to the increased activity around the sites.

Localized impacts to vegetation would be high, as they would result in the loss and/or alteration of vegetation within the project footprint for the foreseeable future. However, considering the small amount of regionally-common vegetation impacted relative to the size of the park, this impact would be minor.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to have impacts to vegetation in the project area are described above under Alternative 1. Alternative 2 would directly cause the loss of 2.3 acres and the alteration of approximately 5.96 acres of regionally-common vegetation. However, the vegetation that has been or would be lost as a result of past, ongoing, and RFFAs remains only a tiny fraction of the already small amount of vegetation previously affected within this 13.2 million-acre park, and would only slightly increase the existing total. The cumulative impacts attributable to Alternative 2 would be minor and long-term.

Conclusion

Alternative 2 would result in direct, high intensity and long-term negative impacts to contextuallycommon vegetation. However, its overall effect would be minor, because its contribution is minimal in terms of the total park vegetation and those areas already impacted by previous activities and operations within the Nabesna Road corridor.

4.2.3 Soils

Alternative 1 – No Action Alternative

Under Alternative 1, no airstrip extension facilities would be removed, altered, or constructed, so there would be no change to soils within the project area.

Cumulative Impacts

Past actions that have impacted soils in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field Trail; the development of the Ellis Family Homestead, which included some blading and clearing on park lands along its southern boundary; and the development other nearby private property. The cumulative impacts associated with these actions include loss of cover, increased soil compaction, and erosion.

RFFAs that could impact soils within the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); increased traffic on the Nabesna Road; and the further development of private property. All would impact soils. However, with no new direct or indirect impacts to soils proposed under Alternative 1, there would be no new contribution to the existing cumulative impacts on this resource.

Conclusion

Alternative 1 would result in no new impacts to soils. However, the existing impacts to soils resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)

Alternative 2 would disturb about 2.3 acres of shallow subsurface soils during excavation, construction, and maintenance of the two RSAs. Direct impacts to soils as a result of Alternative 2 would be of medium intensity to a small, highly localized area and would include compaction, loss of cover, and exposure to localized runoff and erosion. Direct impacts from the project activities would be highest during construction, but would continue during maintenance activities at reduced levels.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to have minor overall impacts to soils in the project area are described above under Alternative 1. The implementation of Alternative 2 would directly result in the loss of ground cover protecting up to 2.3 new acres of regionally-common soils.

However, the soils that are or would be lost as a result of past, ongoing, and RFFAs remain a tiny fraction of the already small quantity of disturbed lands within the 13.2 million-acre park. Thus, Alternative 2 would contribute only a relatively small increase to the low quantity of surface soils already lost parkwide. The cumulative negative impacts attributable to this alternative would be minor but long-term.

Conclusion

Implementation of Alternative 2 would result in direct and indirect, medium intensity and long-term negative impacts to contextually-common soils. However, its overall effect would be minor, because its contribution is minimal in terms of the total park soils and those areas already impacted by previous activities and operations within the Nabesna Road corridor.

4.2.4 Wildlife

Alternative 1 – No Action Alternative

Under Alternative 1, no airstrip extension facilities would be removed, altered, or constructed, so there would be no new impact to wildlife within the project area.

Cumulative Impacts

Past actions that have impacted wildlife in the project area include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000); the construction and maintenance of the Nabesna Road; the construction and maintenance of the Reeve Field Trail; the development of the Ellis Family Homestead, which included some blading and clearing on park lands along its southern boundary; and the development of other nearby private property. Cumulative impacts related to these actions include the disturbance of wildlife by construction, operation, and maintenance activities, and the alteration and/or destruction of wildlife habitat.

RFFAs that could impact wildlife within the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); development of a public use cabin at the Rambler Prospect; the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); increased traffic on the Nabesna Road; and the further development of private property. These actions would include a direct disturbance of wildlife, an increase in injured wildlife, and the indirect alteration and/or loss of wildlife habitat. However, with no new direct or indirect impacts proposed under Alternative 1, there would be no new contribution to the existing cumulative impacts on wildlife.

Conclusion

Alternative 1 would result in no new impacts to wildlife. However, the existing impacts to wildlife resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)

Alternative 2 would cause direct impacts to wildlife. During the proposed project's construction period, wildlife in the immediate vicinity of the construction activities would be temporarily displaced. Maintenance activities would also disturb wildlife.

This project would also eliminate approximately 2.3 acres and alter approximately 5.96 acres of wildlife habitat. However, neither of the proposed airstrip extensions would be located in a sensitive area.

The impacts on wildlife from Alternative 2 would include a direct displacement of wildlife and a reduction in available wildlife habitat. These impacts would be minimized by the mitigation measures described in Section 2.5.

Localized impacts to wildlife would be of medium intensity and long-term, as this action would result in a loss of habitat within the project footprint for the foreseeable future. However, considering the tiny amount of habitat impacted relative to the size of the park, that impact would be minor.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to have minor overall impacts to wildlife in the project area are described above under Alternative 1. The implementation of Alternative 2 would directly result in the disturbance of wildlife within the extension facilities and the loss of 2.3 acres and the alteration of 5.96 acres of habitat. However, the wildlife habitat that would be lost as a result of past, ongoing, and RFFAs is a small fraction of the habitat present within the 13.2 million-acre park, and Alternative 2 would contribute only a tiny addition to the small amount of park habitat already affected. Therefore, the cumulative impacts attributable to implementation of Alternative 2 would be of low intensity and long-term in duration.

Conclusion

Alternative 2 would result in direct, low intensity and long-term negative impacts to contextuallyimportant wildlife. However, its overall effect would be low, because its contribution is minimal in terms of total park wildlife populations.

4.2.5 Visitor Services

Alternative 1 – No Action

Under Alternative 1, no airstrip extension facilities would be removed, altered, or constructed, so there would be no change to visitor services within the project area.

Cumulative Impacts

Past efforts to enhance visitor services in the Nabesna District include the development of the Slana Visitor Information Station, the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1997). An improvement of Nabesna Road maintenance, the development of waysides and interpretive signage within the road corridor, and trail improvements have also occurred. All have aided in directing visitors to accommodations, preparing visitors for backcountry experiences, and fostering an appreciation of the cultural and natural resources for which the park was established.

RFFAs that could affect the delivery of visitor services within the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); development of a public use cabin at the Rambler Prospect; the continuing maintenance of and/or improvement to the Nabesna Road (ADOT 2002); increased traffic on the Nabesna Road; and the further development of private property.

Conclusion

Alternative 1 would result in no new impacts to visitor services. However, the existing impacts to visitor services resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extension (Proposed Action)

The park purposes contained in WRST's enabling legislation include providing reasonable access for wilderness recreational activities. Many such activities in the Nabesna District are only accessible by air. Improving the Devils Mountain Lodge Airstrip by adding these extension facilities would enhance that opportunity, consequently improving visitor services.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to have minor overall impacts to visitor services in the Nabesna District are described under Alternative 1. Alternative 2 would improve

the Devils Mountain Lodge Airstrip, expanding and enhancing local transportation opportunities for visitors, local residents, park employees, and emergency service providers. This would result in medium intensity, long-term beneficial impacts to contextually-common visitor services.

Conclusion

Alternative 2 would result in direct, medium intensity and long-term beneficial impacts to contextuallyimportant visitor services. However, its overall effect would be minor, because its contribution is minimal in terms of visitor services throughout the park.

4.2.6 Visitor Experience

Alternative 1 – No Action

Visitor experience would not change under Alternative 1 as there would be no changes to the Devils Mountain Lodge Airstrip.

Cumulative Impacts

Past and present actions which have enhanced visitor experience in the Nabesna District include the development of the Slana Visitor Information Station, the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1997). An improvement of Nabesna Road maintenance, the development of waysides, installation of interpretive signage within the road corridor, and trail improvements have also occurred. These have aided in directing visitors to accommodations, preparing visitors for backcountry experiences, and fostering an appreciation of the cultural and natural resources for which the park was established.

RFFAs that could affect visitor experience within the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic tailings (NPS 2000); the development of a public use cabin at the Rambler Prospect; the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); increased traffic on the Nabesna Road; and the further development of private property.

Conclusion

Alternative 1 would result in no new impacts to visitor experience. However, the existing impacts to visitor experience resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Improvements (Proposed Action)

Alternative 2 would result in both direct long-term, beneficial effects of medium intensity to visitor experience and indirect, long-term, negative effects of medium intensity to visitor experience. Alternative 2 would also improve safety and provide greater access to remote recreational sites, resulting in an indirect, beneficial effect of medium intensity on the same resource. Improvements to the Devils Mountain Lodge Airstrip would also help WRST provide "reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities," goals which were specifically mentioned in the park's enabling legislation

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to have minor overall impacts to visitor experience in the Nabesna District are described under Alternative 1. Alternative 2 would expand local development, increasing aircraft traffic and noise, and generating a direct, negative effect of medium intensity on a resource which is considered common in context.

Conclusion

Alternative 2 would result in direct and indirect, long-term, medium beneficial and negative impacts on contextually-important visitor experience. However, this action's overall effect would be low, because its contribution is negligible in terms of visitor experience throughout the park.

4.2.7 Economic Environment

Alternative 1 – No Action Alternative

There would be no change in the economic environment under Alternative 1 because there would be no improvement of the Devils Mountain Lodge Airstrip and consequently no changes in local tourism industry, the source of most local economic activity.

Cumulative Impacts

Past and present actions which have enhanced the economic environment of WRST's Nabesna District include the development and operation of the Nabesna Mine and Rambler Prospect (Stanley 1978; NPS 2000), the construction and maintenance of the Nabesna Road, and the development of local businesses on private lands. The NPS also constructed the Slana Visitor Information Station, the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1997), and installed waysides and interpretive signage within the Nabesna Road corridor. All these actions have enhanced the local economy by providing employment or helping attract visitors.

RFFAs that could affect the economic environment of the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); the development of a public use cabin at the Rambler Prospect; the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); increased traffic on the Nabesna Road; and the further development of private property.

Conclusion

Alternative 1 would have no direct or indirect impact on the economic environment. However, the existing impacts to the economic environment resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extension (Proposed Action)

Alternative 2 would have direct and indirect impacts on the economic environment of the Nabesna District. The Ellis family would benefit directly as would any other commercial operators whom the family permitted to use the Devils Mountain Lodge Airstrip. Any expansion of air taxi or flightseeing services from the Devils Mountain site could potentially increase local, indirectly benefitting other service providers located within the Nabesna district.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to affect the economic environment in the Nabesna District are described under Alternative 1. Implementation of Alternative 2 would add both direct and indirect, long-term, beneficial impacts of medium intensity on a locally-common resource.

Conclusion

Alternative 2 would enhance opportunities for the Ellis family's two hunting concessions and air taxi business, resulting in direct, long-term, low intensity, beneficial impacts to the contextually-common economic environment. However, its overall effect would be low, because its contribution is minimal in terms of the total park economy.

4.2.8 Safety

Alternative 1 – No Action Alternative

Alternative 1 would not result in any additional impacts to local safety procedures and activities since no new construction would occur or new services would be developed.

Cumulative Impacts

Past actions that have impacted safety in the greater Nabesna region include the construction and seasonal maintenance of the Nabesna Road, the district's growing population and increased traffic, the addition of the NPS ranger and visitor information center at Slana, a significant expansion in local cell phone coverage, and a more visible law enforcement presence.

RFFAs that could affect safety within the project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); and further increases in local population and traffic.

Conclusion

Alternative 1 would have no direct or indirect impact on safety. However, the existing impacts to safety resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)

Construction and maintenance of the Devils Mountain Lodge Airstrip Extensions would directly benefit safety by providing a smoother and longer surface from which to stage local flight operations. Direct impacts would begin immediately following the installation of the proposed improvements.

Cumulative Impacts

Past, ongoing, and future actions that have had and would continue to affect safety within the general project area are described above under Alternative 1. Alternative 2 would enhance the safety of the Devils Mountain Lodge Airstrip, enhancing air transportation within the entire Nabesna district. The impacts attributable to this alternative would be minor and long-term, but would generally be considered beneficial to local residents, park staff, park visitors, and emergency responders.

Conclusion

Alternative 2 would result in direct, long-term, medium intensity, beneficial impacts to contextuallycommon park safety. However, its overall effect would be low, because its contribution is minor in terms of total park safety.

4.2.9 Park Operations

Alternative 1 – No Action Alternative

Alternative 1 would not result in direct impacts to park operations since no new construction would occur or new services developed.

Cumulative Impacts

Park operations have changed as a result of past and present actions. Actions which have impacted park operations in the Nabesna district include the development of the Slana Visitor Information Station, the Betty Freed Research Facility (NPS 2001), the Kendesnii (Twin Lakes) Campground (NPS 2004), and the Skookum Volcano Trail (NPS 1978). An improvement of Nabesna Road maintenance, the development of waysides and interpretive signage within the road corridor, and trail improvements have also occurred.

RFFAs that could affect park operations within the general project area include the further development and operation of the Nabesna Mine and/or the cleanup of its acidic mill tailings (NPS 2000); the continuing maintenance of and/or improvements to the Nabesna Road (ADOT 2002); and further increases in local population and traffic.

Conclusion

Alternative 1 would have no direct or indirect impact on park management. However, the existing impacts to park management resulting from past activities would remain.

Alternative 2 – Devils Mountain Lodge Airstrip Extensions (Proposed Action)

There is presently no airstrip located on park lands or suitable for park fixed-wing flight operations within the Nabesna Road corridor. Alternative 2 could benefit park operations in the project area, including interpretation, ranger patrols, search and rescue missions, law enforcement, and cooperative resource management, by providing opportunities for park staff to stage some fixed-wing flight operations from the Devils Mountain Lodge Airstrip.

Cumulative Impacts

Past, ongoing, and future actions that have affected park operations within the Nabesna District are described above under Alternative 1. The implementation of Alternative 2 would contribute an additional direct, long-term and locally beneficial effect of medium intensity on a contextually-common resource.

Conclusion

Alternative 2 would result in direct, long-term, medium intensity, beneficial impacts to contextuallycommon park operations. However, this action's overall effect would be low, because its contribution is minimal in terms of the total park operations.

5.0 CONSULTATION AND COORDINATION

5.1 Agency Consultation and Coordination

The NPS is the lead agency in the development of this EA. There was no public scoping in the development of this document. NPS policies do not require public scoping during draft document preparation of an EA. This EA will be available for public review and comment for a minimum of 30 days. Following the public review period, all the public comments will be considered.

A final decision by the NPS Alaska Regional Director may come in the form of a Finding of No Significant Impact (FONSI), which would take into account any new information and public comment, and select an alternative to implement. If a FONSI is approved, it would be sent to those individuals and organizations that commented during the public review period, and it would be available on the park's web site (<u>http://www.nps.gov/wrst/</u> and <u>http://www.nps.gov/wrst/parkmgmt/planning.htm</u>) and the NPS Planning, Environment, and Public Comment web site (<u>http://parkplanning.nps.gov/</u>).

The NPS has determined that there are no T&E Species within the immediate project area; therefore Section 7 consultation with the USFWS is not required.

5.2 List of Preparers

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6.0 REFERENCES

- Alaska Department of Commerce and Economic Development. (2010). Alaska Community Database Community Information Summaries: McCarthy. Retrieved August 18, 2010.
- Alaska Department of Natural Resources. (1985). Vegetation Map for the Copper River Resource Mapping Area.
- Alaska Department of Transportation and Public Facilities. (1993). Nabesna Road Scoping Document, June 1993.

. (2002). Nabesna Road Scenic Corridor Plan.

- Alaska Exotic Plant Information Clearinghouse. 2005. *Invasive Plants of Alaska*. Alaska Association of Conservation Districts Publication. Anchorage, Alaska.
- Biddle, K. G. (2011). WRST Cultural Resource Management Specialist. Personal communication.
- Bleakley, G. T. (2002). Contested Ground: An Administrative History of Wrangell-St. Elias National Park and Preserve. National Park Service, United States Department of the Interior.
- Cellarius, B. (2012). WRST Subsistence Specialist. ANILCA Section 810(a) Summary Evaluation and Findings.
- Cook, M. B., C. A. Roland, et al. (2007). An Inventory of the Vascular Flora of Wrangell-St. Elias National Park and Preserve, Alaska. Department of the Interior, National Park Service. Natural Resource Technical Report NPS/CAKN/NRTR-2007/067.
- Federal Aviation Administration. (2010). Alaska Airport Search. Retrieved August 16, 2010, from http://www.airnav.com/airports.
- Goldsmith, S. (2007). *The Rural Remote Economy of Alaska*. Anchorage, AK, Institute of Social and Economic Research University of Alaska.
- Hulten, Eric. (1968). *Flora of Alaska and Neighboring Territories*. Stanford, California: Stanford University Press.
- Institute of Social and Economic Research. (2010). Soils: Copper River-Gulf of Alaska Sub-Region.
- Keogh, M. (2011). WRST Concessions Manager. Personal communication.
- Lain, A. (2011). WRST Invasive Plant Biotech. *Report: Invasive Plant Species Assessment of Ellis Airstrip.*
- Mullen, P. O. (2011). WRST Compliance Archeologist. *Findings of Section 106 Review for Ellis Airstrip Extension.*
- National Park Service. (1986). General Management Plan, Land Protection Plan, Wilderness Suitability Review. Wrangell-St. Elias National Park and Preserve.
- . (1988). Final Environmental Impact Statement. Wilderness Recommendations, Wrangell-St. Elias National Park and Preserve, Alaska. NPS D-17-A.
- . (1990). Final Environmental Impact Statement. Cumulative Impacts of Mining, Wrangell-St. Elias National Park and Preserve, Alaska. NPS D-120-A.
- _____. (1997). *Skookum Volcano Trail Environmental Assessment*. Wrangell-St. Elias National Park and Preserve.
- . (1998). Archaeological Resources in Wrangell-St. Elias National Park and Preserve, Alaska. An Overview and Assessment. Resources Report NPS/ARRCR/CRR-98/32. Anchorage, Alaska.

(2001) Freed Property Acquisition Environmental Assessment. Wrangell-St. Elias National Park and Preserve. —. (2003). Ecological Subsections, Wrangell-St. Elias National Park and Preserve. Central Alaska Network Inventory and Monitoring Program. . (2004). Twin Lakes (Kendesnii) Campground Environmental Assessment. Wrangell-St. Elias National Park and Preserve. -. (2005). Long-Range Interpretive Plan. Wrangell-St. Elias National Park and Preserve. -. (2006). Management Policies. . (2007a). Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska. Alaska Regional Office, Anchorage, Alaska. -. (2007b). Access to Inholdings Environmental Assessment. Wrangell-St. Elias National Park and Preserve. http://concessions.nps.gov/management.htm. --. (2010b). Mammals in Wrangell-St. Elias National Park and Preserve. Retrieved August 31, 2010, from http://www.nps.gov/wrst/naturescience/mammals.htm —. (2010c). Wrangell-St. Elias Bird Checklist. Retrieved August 31, 2010, from http://www.nps.gov/wrst/naturescience/upload/WRST%20Bird%20Checklist.pdf Putera, J. (2011). WRST Wildlife Biologist. Personal communication. Record, Holly. (1983). Where Raven Stood: Cultural Resources of the Ahtna Region. Fairbanks, Alaska. Cooperative Park Studies Unit, University of Alaska Fairbanks. Stanley, Kirk W. (1978). Nabesna Gold Mine Historic District. National Register Nomination. Swanson, D. K. (2001). Ecological Subsections of Wrangell-St. Elias National Park and Preserve,

(2000). Nabesna Mining Plan of Operations Environmental Assessment. Wrangell-St. Elias

Alaska. Department of the Interior, Alaska Regional Office, Inventory and Monitoring Program: 109.

Terwilliger, M. (2011). WRST Ecologist. Personal communication.

National Park and Preserve.

- Viereck, L. A., C. T. Dyrness, A. R. Batten, and K. J. Wenzlick. (1992). *The Alaska Vegetation Classification*. Portland, Oregon: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. General Technical Report PNW-GTR-286.
- Windisch-Cole, B. (1997). "A Showcase of Alaska's Frontier: The Copper River Region." *Alaska Economic Trends* 17.

YCC (Youth Conservation Corps) Tanacross. (1979). Nabesna Road Inventory. Tanacross, Alaska.

APPENDIX A

ANILCA SECTION 810(A)

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 evaluations of potential restrictions to subsistence activities that could result from authorizing the extension of both ends of the privately owned Devils Mountain Lodge airstrip onto adjacent park lands within Wrangell-St. Elias National Park and Preserve, Alaska. These extensions would constitute new access facilities under section 1110(b) of ANILCA and would improve safety to pilots and passengers using the airstrip, which is located on the north side of the park near the end of the Nabesna Road.

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. Wrangell-St. Elias National Park, containing approximately eight million one hundred and forty-seven thousand acres of public lands, and Wrangell-St. Elias National Preserve containing approximately four million one hundred and seventeen thousand acres of public lands, was created by ANILCA, section 201(9), for the following purposes:

"To maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes, and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals; 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 park, where such uses are traditional, in accordance with the provisions of Title VIII."

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

III. PROPOSED ACTION ON FEDERAL LANDS

The National Park Service (NPS) is considering two alternatives for authorizing the expansion of the privately owned Devils Mountain Lodge Airstrip onto park lands at either end of the airstrip. A full discussion of the alternatives and their anticipated effects is presented in the Environmental Assessment (EA). The alternatives are summarized briefly below.

Alternative 1 – No Action: Under Alternative 1, the NPS would not issue an ANILCA Section 1110(b) Right-of-Way Certificate of Access (RWCA) to extend the privately owned Devils Mountain Lodge Airstrip onto park lands. No facilities would be removed, modified, or constructed. This alternative represents a continuation of the existing condition and provides a baseline for evaluating the changes and impacts of the action alternative.

Alternative 2 – Devils Mountain Lodge airstrip improvements (proposed action): Under Alternative 2, the NPS would issue a RWCA to extend the existing privately owned Devils Mountain Lodge Airstrip onto adjacent park lands. This access facility is located on the north side of Wrangell-St. Elias National Park and Preserve near the end of the Nabesna Road. It is used in support of commercial air service operations and commercial hunting guide concessions. The proposed improvements would include extensions at both ends of the existing airstrip and would impact a total of 8.26 acres of land. The improvements would take place on rectangular areas measuring 600 feet long by 300 feet wide at each end of the existing airstrip. Extending off the ends of the existing airstrip, a 100 foot wide and 500 foot long runway extension area would be cleared of all vegetation and leveled. The vegetation in the remaining area would be cropped near ground level. Construction is anticipated to occur in late spring or early summer 2012. Once constructed, regular maintenance would occur as needed. These extensions would improve safety to pilots and passengers using the airstrip and would also allow use of the strip by larger aircraft.

IV. AFFECTED ENVIRONMENT

A summary of the affected environment pertinent to subsistence use is presented here. The following documents contain additional descriptions of subsistence uses within Wrangell-St. Elias National Park and Preserve:

Bleakley, Geoffrey T. 2002. Contested Ground, An Administrative History of Wrangell-St. Elias National Park and Preserve, Alaska, 1978-2001, NPS Alaska Region.

Final Environmental Impact Statement, Wilderness Recommendation, NPS Alaska Region, 1988.

Haynes, Terry L., Martha Case, James A. Fall, Libby Halpin, and Michelle Robert. 1984. The use of Copper River salmon and other wild resources by Upper Tanana communities, 1983-1984. ADF&G Division of Subsistence, Technical Paper No. 115.

Marcotte, James R. 1992. Wild fish and game harvest and use by residents of five Upper Tanana communities, Alaska, 1987-88. ADF&G Division of Subsistence, Technical Paper No. 168.

Norris, Frank. 2002. Alaska Subsistence: A National Park Service Management History, NPS Alaska Region.

NPS Alaska Region. 1986. General Management Plan/Land Protection Plan, Wrangell-St. Elias National Park and Preserve.

NPS Alaska Region. 1988. Wrangell-St. Elias Subsistence Management Plan. (Updated most recently in 2004.)

NPS Alaska Region. Wrangell-St. Elias National Park and Preserve Subsistence Users Guide. (Updated most recently in 2005.)

Stratton, Lee, and Susan Georgette. 1984. Use of fish and game by communities in the Copper River Basin, Alaska: a report on a 1983 household survey. ADF&G Division of Subsistence, Technical Paper No. 107.

Subsistence uses are allowed within Wrangell-St. Elias National Park and Preserve in accordance with Titles II and VIII of ANILCA. The national preserve is open to federal subsistence uses and state authorized general (sport) hunting, trapping and fishing activities. Qualified local rural residents who live in one of the park's twenty-three designated resident zone communities or have a special subsistence use permit issued by the park superintendent may engage in subsistence activities within the national park. State-regulated sport fishing is also allowed in the national park. The proposed action would take place on and largely impact lands within the national preserve.

Based on 2010 U.S. Census data, the National Park Service estimates that approximately 5,200 individuals are eligible to engage in federal subsistence activities in Wrangell-St. Elias National Park and Preserve. These activities include hunting, trapping, fishing, berry picking, gathering mushrooms and other plant materials, collecting firewood, and harvesting timber for house construction. Most subsistence hunting within Wrangell-St. Elias occurs off the Nabesna and McCarthy Roads and the trails that originate from them. The Copper, Nabesna, Chisana and Chitina Rivers serve as popular riverine access routes for subsistence users. Most of the subsistence fishing takes place in the Copper River, although some local residents harvest freshwater fish in lakes within the park and preserve.

The Nabesna District is a popular moose and sheep hunting area. Other subsistence wildlife resources in the area include grizzly and black bear, furbearers, and waterfowl. During the 1970s, caribou were harvested in the area (Record 1983: 147). The fish species documented in the district during the park's freshwater fish inventory included arctic grayling, burbot, lake trout, whitefish, and slimy sculpin (Markis et al. 2004). Vegetation along the Nabesna Road consists of black spruce wetlands, mixed spruce uplands, birch and alder, mixed tussock tundra, willow/shrub communities, and open lichen/feather moss meadows. Blueberries, currants, and low-bush cranberries (also known as lingonberries) are harvested in the late summer and fall.

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 considerable from previous years due to weather conditions, 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 which could be impacted.

The evaluation criteria are as follows:

1. the potential to reduce important subsistence fish and wildlife populations by (a) reductions in numbers, (b) redistribution of subsistence resources, or (c) habitat losses;

2. what affect the action might have on subsistence fisher or hunter access; and

3. the potential for the action to increase fisher or hunter competition for subsistence resources.

The potential to reduce populations:

No significant impact to the number or distribution of fish or wildlife harvested for subsistence is anticipated as a result of the proposed action or the no-action alternative. The footprint of the airstrip expansion is small, and any wildlife habitat loss would be minor. Any disturbance of wildlife caused by the construction and maintenance of the airstrip extensions would be temporary. The vegetation clearing associated with the airport expansion could remove timber resources that could be used by local residents for subsistence uses such as firewood or house logs. This impact could be mitigated by allowing NPS-qualified subsistence users to harvest both dead and green standing timber in the impact area prior to the airstrip expansion construction. In sum, the proposed alternatives are not expected to significantly reduce populations of important subsistence resources.

The effect on subsistence access:

The alternatives evaluated in this analysis are not anticipated to result in a significant restriction to subsistence access. Access for federal subsistence uses in the Wrangell-St. Elias National Park and Preserve is granted pursuant to Section 811 of ANILCA. Allowed means of access by federally qualified subsistence users in WRST include motorboat, snowmachine (subject to frozen ground conditions and adequate snow cover), ORVs, and airplane (preserve only), along with non-motorized means such as foot, horses, and dog teams. The proposed action alternative along with the no-action alternative would have no direct impact on allowed means of subsistence access, nor would the alternatives affect the areas open to subsistence users or access routes to those areas. Thus, neither of the alternatives discussed in this analysis would affect subsistence hunter or fisher access.

The potential to increase competition:

Competition for subsistence resources on federal public lands is not expected to increase under either of the alternatives discussed in this analysis. The number of guided hunting clients is specified in the applicant's hunting guide concession contracts and would not change under the proposed action. Therefore, neither the no-action alternative nor the proposed action is expected to adversely affect resource competition.

VI. AVAILABILITY OF OTHER LANDS

The EA and this evaluation have described and analyzed the proposed alternatives. No other alternatives that would reduce or eliminate the use of public lands needed for subsistence purposes were identified.

The amount of land affected by the proposed action is minimal in relation to the overall amount of federal public land in the park and the preserve, and it is possible for subsistence users to utilize other lands.

VII. ALTERNATIVES CONSIDERED

The EA and this evaluation have described and analyzed the proposed alternatives. The proposed actions are consistent with NPS mandates and the General Management Plan for the park and preserve. No other alternatives were identified that would accomplish the objectives of the proposed action.

VII. FINDINGS

This analysis concludes that none of the alternatives discussed in this evaluation will result in a significant restriction of subsistence uses.

APPENDIX B

FINDINGS OF SECTION 106 REVIEW

FOR DEVILS MOUNTAIN AIRSTRIP EXTENSIONS

SUBMITTED TO: Judith E. Bittner, Alaska State Historic Preservation Officer

IDENTIFICATION: Finding of No Historic Properties Affected

Pursuant to Section 106 (16 USC 470f) of the National Historic Preservation Act (of 1966, as amended) and 36 CFR §800.4(d)(1), Wrangell-St. Elias National Park and Preserve (WRST) did not identify any archeological resources within the APE of this undertaking to which the Criteria for Evaluation (36 CFR §60.4) could be successfully applied. A finding of "No Historic Properties Affected" was reached following this Identification level archeological inventory.

LOCATION	
LOCALE:	Nabesna, AK
USGS QUAD:	Nabesna B-4
TOWNSHIP:	7N
RANGE:	13E
SECTION(s):	10 & 15
MERIDIAN:	Copper River
ACREAGE SURVEYED: 8.4 acres	

DEFINITION OF UNDERTAKING: WRST proposes to grant a right-of way certificate of access to authorize a private land owner to construct and maintain on park lands approaches to their private airstrip. This project will improve the safety of the airstrip by making it longer and clearing the approaches of trees and other potential hazards. This will also allow larger aircraft to safely use the airstrip. The airstrip will be extended by blading and smoothing additional length with heavy equipment. The approaches will be cleared using hand tools.

AREA OF POTENTIAL EFFECTS (APE): The APE is divided into two related areas at both ends of the existing airstrip. The twin APEs extend from the current airstrip for an additional 500 feet at a width of 100 feet of cleared and bladed area plus a 100-foot buffer of "vegetation control area" (see attached map).

ATTACHMENTS:

- 1. Project Map (1:63,360 USGS topographic map or other appropriate format)
- 2. Project sketch map
- 3. Photographs

FIELD INVENTORY BY: K. Gregory Biddle

REPORT PREPARED BY: Patrick O. Mullen

FIELD INVENTORY DATE: 09/7/2011

ENVIRONMENTAL SETTING: The Ellis family property is located just west of the Nabesna River near the terminus of the historic Nabesna Road at an elevation of approximately 2,900 feet above sea

level. The family's Devils Mountain Lodge and private airstrip are constructed on an abandoned alluvial fan on the right (south) bank of Skookum Creek at the base of White Mountain. Vegetation in the area is boreal forest dominated by White Spruce intermixed with willow and alder riparian zones and disturbed areas.

IDENTIFICATION METHODS: Prior to fieldwork, Mullen consulted the AHRS records, site files, and site maps as well as maps of Ahtna place names, routes, and traditional use areas based of the work of Kari (2008). Mullen also consulted with Lynn Ellis, WRST Pilot, who informed him that his father, Bill Ellis, had constructed the airstrip in the early 1960's, but he could not recall the exact year. Prior to the construction of the airstrip, the family simply used the Nabesna Road as an airstrip. In the field, Biddle conducted a pedestrian survey of the entire APE wherein he discovered no cultural resources.

PREVIOUS 106 REVIEWS: Ahtna traditional place names in the area include Tsitae, Dehsoon' Cheeg, and Natsiidi which are names for mountains six miles to the northwest, the mouth of Jack Creek, and Devils Mountain respectively. All of these named places are at least three miles distant. Traditional use areas in the vicinity include the mouth of Jack Creek and the east foot of the Raven Hills on the left (west) bank of the Nabesna River. Records indicate that these traditional places were used as a village and camp respectively. Both traditional use areas are at least three miles from the project area. The mouth of Jack Creek, also called Nabesna Bar was investigated by the Bureau of Indian Affairs (BIA) Alaska Native Claims Settlement Act (ANCSA) Office as an ANCSA 14(h)(1) selection (BIA ANCSA 1996). In that investigation, the ANCSA investigators found evidence of extensive native use of the site. The site was determined by the ANCSA archeologists to be ineligible for conveyance because it had already been selected as a native allotment. Similarly, the BIA ANCSA 1994). The ANCSA archeologists found a single unremarkable cabin with no association with events or persons significant in Ahtna history. Therefore, it was also determined ineligible for conveyance.

Historic and traditional routes in the area extend off of the Nabesna Road and are still in use either yearround or as winter trails. The Reeve Field Trail leaves the Nabesna Road at approximately mile marker 41 just over a mile north of the APE. The trail heads east towards the Nabesna River. At the river, the trail intersects a trail which runs up and down the river. In winter, the trail also crosses the Nabesna River. Another trail continues on to the south past the end of the Nabesna Road nearly two miles south of the project area. This trail heads up Jacksina Creek to Wait Creek and eventually over to Tanada Lake where it joins the Tanada Lake Trail.

The Nabesna Road itself (49NAB-00472) is a historic road constructed to access the Nabesna Mine. The road runs parallel to the airstrip immediately beside the twin areas of potential effect. The road is about 50 feet to the west of the airstrip.

Other sites in the area include the Nabesna Mine (49NAB-00011) and the Rambler Prospect (49NAB-00072), the historic Kanski's (49NAB-00100) which is now owned by the Ellis family, the ruins of a cabin which was once the red-light entertainment district for the mine workers (49NAB-104), a wooden platform loading dock along the Nabesna Road (49NAB-00111), and Little Al's, a residential cabin near the Nabesna Mine (49NAB-0292).

The sites along the Nabesna Road were predominantly documented by McMahan in his survey of the road corridor (McMahan 1994). Other surveys in the area include the two BIA reports (BIA 1994, 1996), two trails surveyed by Northern Land Use Research for an NPS EIS (Proue et al. 2008), and a survey of the Jacksina Creek Trail by WRST archeologists (Lang and Dodson 1994). Cultural resources discovered in these surveys are as described above.

RESULTS OF FIELD INVENTORY: No historic properties were identified in the APE of this project. Although the project areas are beside the historic Nabesna Road, the activities associated with the road appear to be confined to the road corridor itself. No evidence of prior use of the areas was noted and the Ellis family is not aware of any historic use. According to Lynn Ellis, the original construction of the family's airstrip dates to around the early 1960's. As such, the airstrip itself may or may not be historic in nature. The airstrip has been in constant use since its construction. As a product of use, the airstrip is subject to regular maintenance and probably expansion by the Ellis family over approximately the past 50 years. However, according to Lynn Ellis, the family used the Nabesna Road as an airstrip for their flights during the historic period. The preponderance of whatever significance the airstrip itself may have acquired in the past 50 years, if in fact it is that old, would have been acquired proportional to the duration of its use meaning that the overwhelming majority would be recent rather than historic.

PHOTOGRAPHS:



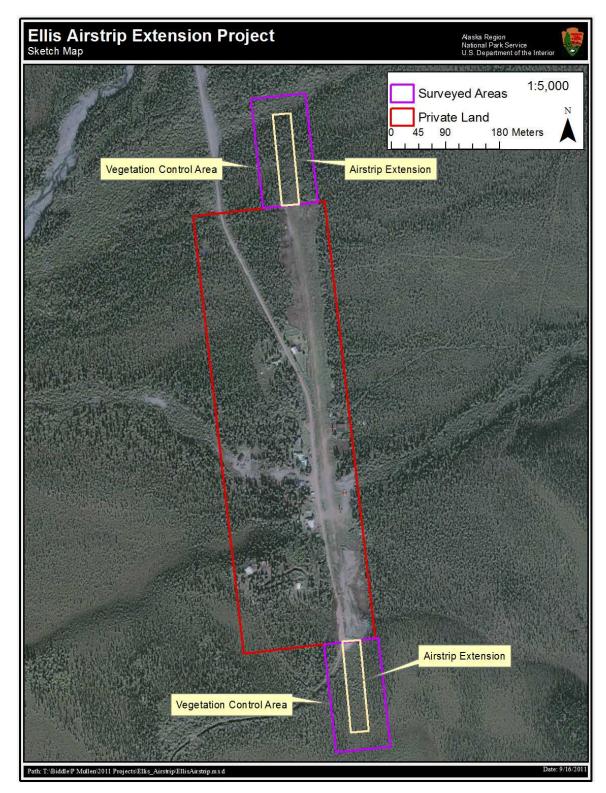
Figure 5. Overview of south end of the airstrip.

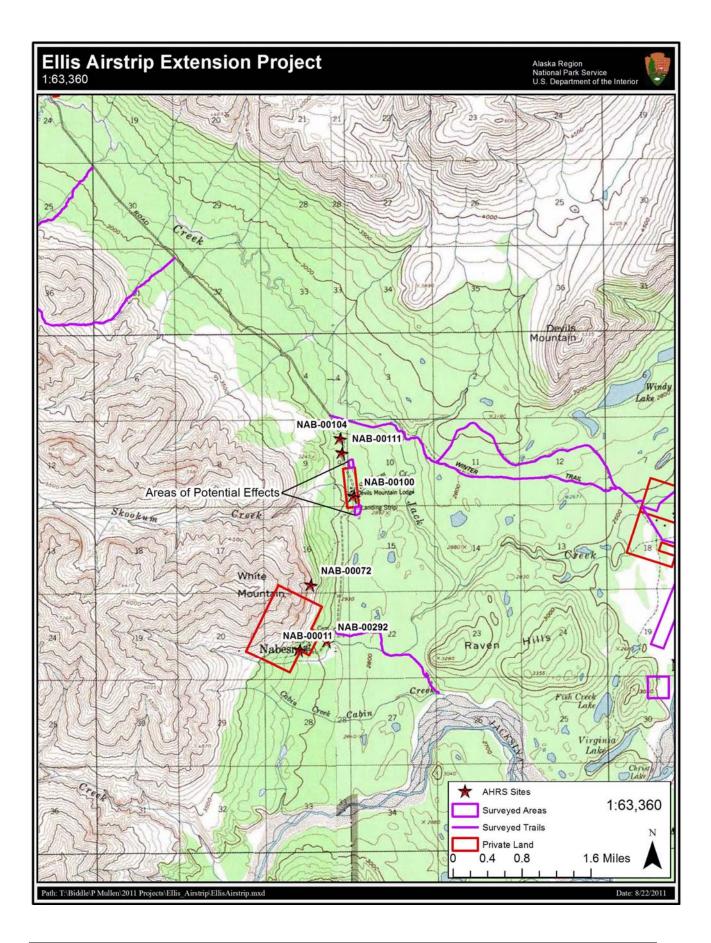


Figure 6.

Vegetation to be cleared at the south end of the airstrip.







BIBLIOGRAPHY:

Bureau of Indian Affairs Alaska Native Claims Settlement Act Office

1994 Report of Investigation for BLM AA-10714J Ahtna, Inc. BIA ANCSA Office, Anchorage.1996 Report of Investigation for Nabesna Bar Ahtna, Inc. BLM AA-10714I. BIA ANCSA Office, Anchorage.

Kari, J.

2008 Ahtna Place Names List. Second Edition. Alaska Native Language Center, Anchorage.

Lang, S. and D. Dodson

1994 Nabesna Road Multiple Trails Survey Archeological Inventory Survey Form. Wrangell - St. Elias National Park and Preserve, Copper Center, AK.

McMahan, J. D.

1994 Cultural Resources Reconnaissance of the Nabesna Road: Slana to Mile 42 (Project 64493). Office of History and Archaeology Report Number 41. Office of History and Archaeology, Anchorage.

Proue, M., B. Neely, and H. Hardy

2009 2008 Addendum to Cultural Resource Survey of ORV Trails, Wrangell - St. Elias National Park, Alaska. Northern Land Use Research, Inc., Fairbanks, Alaska.

APPENDIX C

REPORT: INVASIVE PLANT SPECIES ASSESSMENT OF ELLIS AIRSTRIP

Compiled by: AnnMarie Lain, Exotic Plant Management Leader Date: November 15, 2011

On July 20, 2011 Park intern Timothy Luethke accompanied Mark Keogh (Concession Manager) to survey for invasive plant species. The airstrip on the Ellis private property was surveyed for invasive plant species after getting permission from Christy Ellis to do so.

The following species were discovered in high abundance on the airstrip. Ranking is from AKEPIC. The larger the invasiveness score the more problematic the species is as an invasive plant. Lack of ranking does not indicate lack of invasiveness but rather that it has not been considered by AKEPIC for ranking. Generally the park considers any species with a ranking over 40 to be of high concern.

Ellis Airstrip:

Foxtail barley (*Hordeum jubatum*), rank 63 Mouse-ear chickweed (*Cerastium fontanum*), rank 36 Common plantain (*Plantago major*), rank 44 Pineappleweed (*Matricaria discoidea*), rank 32 Common dandelion (Taraxacum officinale), rank 58 Icelandic poppy (*Papaver croceum*), rank 36

APPENDIX D

Draft ANILCA 1110(b) Right-of-Way Certificate of Access (RWCA)

National Park Service	
Alaska Region	RWCA No.: 9865-12-001
240 West 5 th Avenue, Room 114	Wrangell-St. Elias National Park and
Anchorage, Alaska 99501	Preserve

1. An ANILCA 1110(b) Right-of-Way Certificate of Access (hereinafter "RWCA") is hereby issued pursuant to Section 1110(b) of the Alaska National Interest Lands Conservation Act (ANILCA) of December 2, 1980 (16 USC 3170).

2. This RWCA provides access across National Park Service (hereinafter NPS) managed lands in Wrangell-St Elias National Preserve to the following non-federal land:

U.S. Survey 5535, Chitina Recording District, Third Judicial District, State of Alaska. Also identified as NPS tract WRST 10-113.

3. Nature of Interest:

a. By this instrument the Ellis Family Homestead, an Alaska Limited Partnership (hereinafter "Holder"), whose address is HC63 Box 1402, Gakona, Alaska, 99586, receives a right to construct, operate, use, maintain, and terminate two airstrip extensions on NPS managed lands in Wrangell-St. Elias National Preserve and within an area described as follows:

Bearings are not used because the bearings given in U. S. Survey 5535 are not accurate.

All corners are right angles.

Northern Extension:

Commencing at corner number 3 U. S. Survey 5535, thence

westerly, 15 feet, along the northern boundary of U.S. Survey 5535 to the point of beginning, thence

westerly, 300 feet, along the northern boundary of U.S. Survey 5535, thence

northerly, 600 feet, thence

easterly, 300 feet, thence

southerly, 600 feet, to the point of beginning on the northern boundary of U. S. Survey No. 5535, as shown on Exhibit B, which is attached to and made part of this instrument.

Southern Extension:

Commencing at corner number 4 U. S. Survey 5535, the point of beginning, thence

easterly, 35 feet on the same bearing as the southern boundary of U.S. Survey 5535, thence

southerly, 600 feet, thence

westerly, 300 feet, thence

northerly, 600 feet,

thence easterly, 265 feet, along the southern boundary of U.S. Survey 5535 to the point of beginning, as shown on Exhibit B, which is attached to and made part of this instrument.

Located in protracted Sections 10 and 15, unsurveyed Township 7 North, Range 13 East, Copper River Meridian, Alaska.

The area of use authorized by this RWCA is illustrated on the attached map (Exhibit B).

b. The areas authorized by this RWCA are two (2) three hundred (300) foot-wide by six hundred (600) foot- long airstrip extensions and consist of approximately 8.26 acres in total. Each extension consists of a one hundred (100) foot-wide by five hundred (500) foot-long runway extension core area surrounded by a one hundred (100) foot-wide vegetation control area.

c. This RWCA shall not be construed as an interest in the land authorized for use by this RWCA, or as an abandonment of use and occupancy by the United States, but shall be considered a use of the land as described, anything contained herein to the contrary notwithstanding. This RWCA shall not be construed as an interest in water or a water right or as an abandonment of water use by the United States.

d. The stipulations, plans, maps, or designs set forth in Exhibit A, dated January 24, 2012, attached hereto, are incorporated into and made part of this instrument as fully and effectively as if they were set forth herein in their entirety.

4. Rental Fee. No rental fees apply because it is NPS policy not to charge fees when a requested use involves exercise of a right (not a privilege).

5. General Terms and Conditions:

a. The Holder shall comply with all applicable State and Federal law and existing regulations in the construction, operation and/or maintenance within the area authorized by this RWCA. It is the responsibility of the Holder to obtain any permits or other authorizations that are required by other governmental entities for the uses authorized by this RWCA.

b. This RWCA will expire when it is no longer needed for the purposes for which it is issued unless, prior thereto, it is relinquished, abandoned, or modified pursuant to the terms and conditions of this instrument or of any other applicable federal law or regulation.

c. This RWCA may be amended to adjust the terms and conditions for changed conditions, to correct oversights, or to address conditions not previously contemplated. Either the NPS or Holder may initiate an amendment by notifying the other in writing and providing a justification for the proposed revision or supplement. Amendments by mutual consent of the NPS and Holder may occur, but the NPS may also require an amendment without the consent of the Holder if uses within the area authorized by this RWCA or other conditions become inconsistent with the regulatory standards of Title 43 CFR 36.9 and 36.10(e)(1). The NPS will consult with the Holder when any amendment is initiated. Any amendment must result in the Holder continuing to have adequate and feasible access to his/her property.

d. The Holder shall perform all operations in a good and workmanlike manner.

e. This RWCA is for the purpose of providing the Holder with access across NPS lands to his/her non-federal land or valid occupancy. It does not authorize the Holder to use the area authorized by this RWCA for any activities other than access.

f. This RWCA may be assigned. The proposed assignee must state in writing that he/she agrees to comply with and to be bound by the terms and conditions of the existing RWCA. With such a written statement from the proposed assignee, the NPS Regional Director will approve the assignment of the RWCA to the assignee, who shall become the Holder. The assignment becomes effective upon the written approval of the NPS Regional Director, Alaska Region.

g. Resource Protection. The Holder shall take adequate measures as directed and approved by the superintendent of the NPS unit to prevent or minimize damage to resources. This may include restoration, soil conservation and protection measures, landscaping with indigenous grasses and shrubs, and repairing roads, trails, etc. The superintendent or his/her representative may enter and inspect the area authorized by this RWCA and any facilities in it, as deemed necessary by the NPS and without restriction.

h. Cultural Resources. The Holder will halt any activities in the area authorized by this RWCA and notify the superintendent of the NPS unit upon discovery of archeological, paleontological or historical artifacts. All artifacts unearthed remain the property of the United States.

i. Pesticides/Herbicides. Use of pesticides or herbicides is prohibited within the area authorized by this RWCA.

j. Use by the Holder is subject to the right of the NPS to establish trails, roads, and other improvements and betterments over, upon or through the area authorized by this RWCA. Also, at the discretion of the NPS, the area authorized by this RWCA may be open to use by the public and others. If it is necessary

for the NPS to exercise such right, every effort will be made by the NPS to refrain from unduly interfering with use of this area by the Holder for the purposes intended under this RWCA. The Holder agrees and consents to the occupancy and use by the NPS and by individuals and entities authorized by the NPS, of any part of the area authorized by this RWCA. The Holder's right to "adequate and feasible access" under Title XI of ANILCA will be respected by the NPS.

k. No deviations from the locations authorized in this RWCA shall be undertaken without the prior written approval of the superintendent of the NPS unit. The superintendent may require the filing of a new or amended application for a proposed deviation.

1. Notwithstanding the relinquishment or abandonment of this RWCA by the Holder, the provisions of this RWCA, to the extent applicable, shall continue in effect and shall be binding on the Holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein.

m. Upon expiration or termination of this RWCA, in the absence of any agreement to the contrary, the Holder will be allowed six (6) months or such additional time as may be granted in which to remove from the area authorized by this RWCA all property or improvements of any kind, other than a road and usable improvements to a road, placed thereon by the Holder; but if not removed within the time allowed, all such property and improvements shall become the property of the United States.

n. Upon expiration or termination of this RWCA the Holder may be required by the NPS to restore the NPS lands affected by the RWCA.

o. This RWCA has no effect on any valid existing rights of access pursuant to any other authority.

p. The Holder agrees that in undertaking all activities pursuant to this RWCA, it will not discriminate against any person because of race, color, religion, sex, or national origin.

q. No member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this RWCA or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this RWCA if made with a corporation for its general benefit.

r. Holder shall indemnify the United States against any liability for damages to life, person or property arising from Holder's occupancy or use of the areas authorized for their use.

s. Any alterations to this instrument must be in writing and signed by the NPS and Holder.

t. Nothing herein contained shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of appropriations made by Congress or administratively allocated for the purpose of this RWCA for the fiscal year, or to involve the NPS in any contract or other obligation for the further expenditure of money in excess of such appropriations or allocations.

u. The waiver of any breach of any provision of this RWCA, whether such waiver be expressed or implied, shall not be construed to be a continuing waiver or a waiver of, or consent, to any subsequent or prior breach of the same or any other provision of this RWCA.

IN WITNESS WHEREOF, the Regional Director, Alaska Region of the National Park Service, acting on behalf of the United States, in the exercise of the delegated authority from the Secretary of the Department of the Interior, has caused this ANILCA 1110(b) Right-of-Way Certificate of Access (RWCA 9865-12-001) to be executed this ______, 2012.

Regional

Director, Alaska Region

National Park Service

United States Department of the Interior

ACCEPTED this _____ day of _____, 2012.

<u>Kirk Ellis</u>

Printed name of Holder

Signature of Holder

RWCA 9865-12-001

EXHIBIT A: ALLOWABLE USES AND SPECIAL STIPULATIONS

January 24, 2012

ALLOWABLE USES:

- Holder may utilize the following types of motorized vehicles within the RWCA: airplanes, 2wheel drive highway vehicles, 4-wheel drive highway vehicles, motorcycles, tracked and wheeled maintenance equipment, 4 or 6-wheeled and tracked all-terrain vehicles (ATVs) and off road vehicles (ORVs), and snowmachines.
- Holder may use dump trucks, bulldozers or equivalent motorized equipment for construction and maintenance operations to place fill and grade the runway surface within the 100 foot-wide runway extension areas.
- Holder may place fill material within the runway to a level which exceeds the adjacent ground level.
- Holder may cut and/or remove vegetation, brush, shrubs, and living or dead trees from within the area authorized for use by this RWCA and maintain the vegetation within the vegetation control areas.
- Holder may place synthetic materials such as geotextiles, geoblock, and/or natural materials such as logs, sand, gravel and rock within the 100 foot-wide runway to prevent the loss of, and damage to, soils and substrates.
- Holder may plow snow within the 100 foot-wide runway.
- Holder may post an NPS approved sign noting that the runway provides access to private lands.

SPECIAL STIPULATIONS:

MAINTENANCE:

- Construction and maintenance operations shall be confined to the area authorized for use by this RWCA.
- Holder shall not blade the surface in the vegetation control zones.
- Holder shall contact the superintendent prior to the start of all non-routine maintenance activities (such as grading or brushing the surface or adding additional fill utilizing heavy equipment) to inform the NPS of the nature, extent and schedule of the work to be performed.
- Holder shall not pave, chip seal or otherwise hard seal the runway. Any change in surface material shall require prior written authorization by the superintendent.
- Holder shall not plow snow or grade the runway in a manner that disturbs the adjacent natural soil or vegetation in the vegetation control area.
- Holder shall remove any temporary stakes and/or flagging upon completion of construction or maintenance activities.
- Holder shall take all precautions necessary to prevent wildfires. No burning of debris on parklands will be allowed without specific authorization of the superintendent.
- Holder is authorized to cut or clear any standing live vegetation within the area authorized for use by this RWCA.
- Holder shall not use or place dust suppressant chemicals within the area authorized for use by this RWCA unless authorized by the superintendent or his/her designee.
- Holder shall obtain and maintain any required Army Corps of Engineer permits.

- Holder shall obtain and maintain any required Alaska Department of Transportation and Public Facilities permits.
- Holder shall allow for subsistence harvest of firewood and green logs within the area authorized for use by this RWCA prior to construction, as directed by the superintendent.
- Holder shall not disturb or damage any survey monuments.
- Holder is prohibited from taking sand, gravel, rock, soil or plant material from parklands outside of the area authorized for use by this RWCA.

FUELING:

- No refueling is authorized within the area authorized for use by this RWCA.
- All spills of oil, petroleum products, and hazardous substances shall be reported to the Alaska Department of Environmental Conservation (ADEC) in accordance with Alaska law. Concurrent spill notification shall be provided to the superintendent at (907) 822-5234 at the time notification is provided to ADEC.

HYDROLOGY:

- Holder shall maintain water control features to accommodate flood events and to avoid damage to the facility or environment.
- Holder shall insure that installation and replacement of surface water control features such as culverts, small bridges, French drains, ditches, grade dips, crowning, out-sloping, or depressions with permeable gravels, cobble, or rock will preserve natural hydrological functions within and adjacent to access facilities.

AQUATIC HABITAT AND FISH:

- Access facility drainages shall be routed away from potentially unstable stream channels, fills, and hill slopes.
- Side-casting of materials from an access facility is prohibited on segments within or abutting areas essential for riparian and aquatic protection.

WATER RESOURCES:

- Holder shall not measurably alter the water quality and/or the banks of streams, rivers, or lakes.
- Holder shall not block or change the character or course of, or cause measurable siltation or pollution in any stream, river, pond, pothole, lake, and lagoon or drainage system.

NATIVE PLANTS:

- Prior to importing fill material (such as borrow and gravel) for use on the access facility, Holder shall obtain approval by the superintendent or his/her designee that these materials are free of exotic or invasive plant species.
- When transporting livestock forage and bedding materials with non-native species and their seed across parklands, Holder shall prevent the loss of these materials onto parklands. These materials must be covered with tarps or enclosed in containers to prevent the introduction of exotic or invasive species on NPS lands.

WILDLIFE:

• Holder shall not undertake the clearing of vegetation or construction during bird nesting seasons. If Holder conducts vegetation clearing, grubbing, and other site preparation and construction activities during bird nesting seasons, such activities shall be conducted in a manner that shall not result in the destruction of active bird nests, eggs, or nestlings. If an active nest is encountered at any time, it must be protected from destruction.

