**National Park Service**

**U.S. Department of the Interior**

**Wrangell-St. Elias National Park and Preserve**

**Alaska**

# Record of Decision

## Nabesna Off-Road Vehicle Management Plan and Environmental Impact Statement

## December 2012

Recommended: Eric K. Veach Acting for: Rick Obernesser 12/1/2011

Superintendent, Wrangell-St. Elias National Park and Preserve Date

Approved: Sue E. Masica 12/14/2011

Regional Director, Alaska Date

**National Park Service**

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**UNITED STATES DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**

# RECORD OF DECISION

# NABESNA OFF-ROAD VEHICLE MANAGEMENT PLAN ENVIRONMENTAL IMPACT STATEMENT

**Wrangell-St. Elias National Park and Preserve**
**Alaska**

## INTRODUCTION

This Record of Decision (ROD) documents the establishment of an Off-Road Vehicle (ORV) Management Plan for the Nabesna District of Wrangell-St. Elias National Park and Preserve by the National Park Service (NPS). The purpose of this plan is to provide continued opportunities for appropriate and reasonable access to wilderness and backcountry recreational activities that also accommodates subsistence use and access to inholdings, while protecting scenic quality, fish and wildlife habitat, and other park resource values.

This ROD has been prepared by the NPS pursuant to the National Environmental Policy Act of 1969 and 40 CFR 1505.2. This document details the background of the project, the decision made (selected alternative), other alternatives considered, the basis for the decision, the environmentally preferable alternative, measures adopted to minimize environmental harm, and public involvement in the decision-making process.

## BACKGROUND OF THE PROJECT

The ORV Management Plan will implement the direction established in the General Management Plan for Wrangell-St. Elias National Park and Preserve (GMP) in 1986. NPS actions are guided by established laws and policies, including the NPS Organic Act, the Wilderness Act, Alaska National Interest Lands Conservation Act (ANILCA), and NPS Management Policies 2006.

The park's enabling legislation provides that the unit shall be managed "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… and to provide continued opportunities, including reasonable access… for wilderness recreational activities." This decision balances providing access opportunities for park visitors and local residents while protecting park resources and values.

On June 29, 2006, the National Parks Conservation Association, Alaska Center for the Environment, and the Wilderness Society filed a lawsuit against the NPS in the United States District Court for the District of Alaska regarding recreational ORV use on nine trails within the boundaries of Wrangell-St. Elias National Park and Preserve. In this complaint, the plaintiffs challenged the method used by the NPS to issue recreational ORV permits. They

asserted that in issuing recreational ORV permits, the NPS failed to make the required finding that recreational ORV use is compatible with the purposes and values of the park. They also asserted that the NPS failed to prepare an environmental analysis of recreational ORV use as required by the National Environmental Policy Act of 1969 (NEPA).

In a settlement agreement announced on May 15, 2007, the NPS agreed to suspend issuing recreational ORV permits for three specific trails unless the ground is frozen and until an Environmental Impact Statement (EIS) is completed and a decision is made regarding future authorized uses on park ORV trails. It was agreed that the NPS would endeavor to complete the EIS and Record of Decision by December 31, 2010. The time was extended to December 31, 2011.

## DECISION (SELECTED ACTION)

The NPS has selected Alternative 6 (Improve Trails, Permit Recreational Use on Improved Trails in the Preserve) because it best meets the purpose and need of the project according to objectives identified in the FEIS.

Alternative 6 provides outstanding non-motorized recreational opportunities on improved trails in the National Park and motorized/non-motorized recreational opportunities in the National Preserve. Alternative 6 addresses the resource concerns associated with existing trail condition by improving trails through a combination of re-routes, trail hardening, and trail reconstruction. In doing so, access is provided for backcountry and wilderness activities, accommodating subsistence uses and access to private inholdings. Alternative 6 also enhances non-motorized opportunities in the area.

Because of the cost of trail improvements, NPS will consider the use of volunteers for trail repair and maintenance. Most of the trail reconstruction proposed in this Record of Decision will not be hand crew work but instead will be done utilizing specialized equipment, such as mini excavators or small dozers. Some components of the work that will involve hand labor (such as brush clearing, installation of porous pavement panels, or construction of bridge decking) may be appropriate for volunteers.

Decisions described under this Record of Decision do not affect the status or validity of any right-of-way (such as the Nabesna road or any valid RS-2477).

### Description of the Selected Action

Management actions implemented under this Record of Decision will improve most degraded segments of the nine trails to a design-sustainable or maintainable condition in order to provide reasonable access while protecting park resources. This will result in 64.6 miles of motorized trail being improved (includes both re-routes and reconstruction in place). See Figure 2-12. The resource benefits of trail improvement are quantified on pages 14 and 15 of this ROD. On unimproved trails or trail segments, impact standards will be applied to ensure that resource impacts do not expand and that resource impacts associated with off trail motorized use are minimized. This decision includes improvements to the Suslota trail

which when completed would accommodate recreational ORV use. These improvements will be deferred until decisions are made pertaining to the conveyance of lands outside the park and when the NPS, working with AHTNA and the SHPO, determines that potential impacts to the Old Suslota cultural site at Suslota Lake can be mitigated.

Once improvements are in place, recreational ORV use will be permitted on trails in the National Preserve but not trails in the National Park (Tanada Lake, Copper Lake, and Boomerang). Subsistence ORV use will continue on improved and unimproved trails in the National Park and National Preserve, subject to monitoring/management actions described below.

*Revised Wilderness Eligibility*

The proposed changes to the 1986 wilderness eligibility as shown in Figures 2-1 and 2-2 of the FEIS would be adopted. This would result in motorized trail corridors being reclassified as ineligible and results in an additional 16,929 acres of eligible wilderness. NPS review of Figures 2-1 and 2-2 in the FEIS revealed a mapping error in these figures. The maps as presented in the FEIS show lands within the designated wilderness classified as eligible or ineligible. Corrected maps are attached to this Record of Decision. The mapping corrections do not change the designated, eligible, and ineligible acreages presented in the FEIS.

*Off-Road Vehicle Weight limits*

Recreational ORV use

The following types of vehicles, because of their size, width, weight, or high exertion of pounds per square inch will not be permitted for recreational use: a) Nodwells or other tracked rigs greater than 5.5 feet in width or 4,000 pounds curb weight; b) street legal highway vehicles; c) custom 4x4 jeeps, SUVs, or trucks designed for off-road use; d) original or modified "deuce and a half" cargo trucks; e) dozers, skid-steer loaders, excavators, or other construction equipment; f) motorcycles or dirt bikes; and g) log skidders. Wheeled vehicles (including all terrain vehicles, utility vehicles, and Argos) must be less than 1,500 pounds curb weight, not including trailers.

Subsistence ORV use

The following types of vehicles, because of their size, width, weight, or high exertion of pounds per square inch will not be permitted for subsistence use: a) Nodwells or other tracked rigs greater than 5.5 feet in width or 4,000 pounds curb weight; b) custom 4x4 jeeps, SUVs, or trucks designed for off-road use; c) original or modified "deuce and a half" cargo trucks; d) dozers, skid-steer loaders, excavators, or other construction equipment; e) motorcycles or dirt bikes; and f) log skidders. Wheeled vehicles (including all terrain vehicles, utility vehicles, and Argos) must be less than 1,500 pounds curb weight, not including trailers.

*ORVs for Accessing Private Inholdings*

The use of ORVs for accessing private inholdings within the analysis area will be managed consistent with ANILCA Section 1110(b), implementing regulations at Title 43 CFR 36.10(e)(1), and the NPS Alaska Region's **Interim User's Guide to Accessing Inholdings in National Park System Units in Alaska**.

*Reeve Field Alaska Native Claims Settlement Act (ANCSA) Easement*

The Reeve Field trail crosses private property before reaching the Nabesna River. There is an ANCSA 17(b) easement across the private property. The NPS will work with the private landowners to ensure that the easement is properly marked and that it is connected with the portions of the trail located on federal lands.

*NPS Administrative Use of ORVs*

The following guidelines would apply to NPS administrative use of ORVs on unimproved trails in the Nabesna District:

On unimproved trails where recreational ORV use is not permitted, the following administrative ORV use may occur:

- Search and rescue or law enforcement activities where alternative means of transportation are not feasible or practical.
- Trail maintenance for the purpose of improving degraded trail segments.
- Support for inventory and monitoring only if no other alternative means of transportation is available and only if impacts can be contained within the existing trail footprint.
- Data collection for specific projects only if no other alternative means of transportation is available or feasible and only if impacts can be contained within the existing trail footprint.

On unimproved trails that are restricted or closed to subsistence ORV use, the following administrative ORV may occur:

- Search and rescue or law enforcement activities where alternative means of transportation are not feasible or practical.
- Trail maintenance for the purpose of improving the degraded trail segments.

For anything other than emergency purposes or law enforcement response, the NPS may only use ORVs off existing trails if the off-trail use does not exceed the standards identified in Table 2-6 of the FEIS.

*Trail Improvements and Maintenance*

The following trail improvements will occur (See Figure 2-12):

- Lost Creek trail: A single trail alignment will be located, cleared, or marked along or adjacent to the existing gravel route to consolidate travel and minimize stream crossings. Improvements would result in a maintainable trail.

- Trail Creek trail: A single trail alignment will be located, cleared, or marked along or adjacent to the existing gravel route to consolidate travel and minimize stream crossings. Improvements would result in a maintainable trail.

- Suslota trail: The trail will be improved utilizing gravel from local sources, Geoblock installation, and tread improvement. Improvements will include bridge and puncheon installation at creek crossing SLT-3, and re-routing to a naturally hardened crossing at SLT-1. Improvements will result in a maintainable trail.

- Caribou Creek trail: Improvements will consist of major trail hardening utilizing local gravel sources and/or other trail-hardening methods, re-alignment of creek crossings, re-alignment of a sidehill traverse, and re-grading of the upper portion of the trail. These improvements will result in a maintainable trail.

- Soda Lake re-route: A re-route will be constructed from Lost Creek to Platinum Creek to avoid private property. This re-route will by-pass most of the trail segments currently classed as degraded or very degraded. These improvements will result in a new 7-mile segment of sustainable trail in uplands and 5 miles of maintainable trail along floodplain portions for the balance of the alignment. Once the re-route is completed, the old trail will be seasonally closed to all motorized uses (except those accessing private land) to allow for vegetation and soils recovery.

- Reeve Field re-route: A re-route will be constructed utilizing an old road alignment. This alignment does not currently meet sustainable design guidelines. Some areas of trail hardening will be required. This re-route will by-pass all trail segments currently classed as degraded, very degraded, or extremely degraded. Bridges suitable for ORV passage will be constructed at both Jack Creek crossings. In order to access the Nabesna River and dispersed camping opportunities, the proposed trail will be extended along the floodplain to the south. These improvements will result in a maintainable trail. Once the re-route is completed, the old trail section will be seasonally closed to all motorized users to allow for vegetation and soils recovery.

- Tanada re-route: The trail will be reconstructed to the wilderness boundary utilizing a constructed re-route to the east of the existing trail. The construction of the re-route will use local gravel sources, construction of a bridge across Jack Creek, some spot hardening, and full-bench trail construction utilizing mechanized equipment. These improvements will result in sections of sustainable design and maintainable trail. Once the trail is reconstructed, old degraded trail segments will be closed to all ORV use to allow vegetation and wetland recovery.

- Copper Lake re-route: The trail will be reconstructed in segments. The first segment will utilize the existing trail alignment to Tanada Creek. This section will be widened and built up with gravel excavated from adjacent ditchlines. Supplemental gravel capping and plank tread will be installed in some locations. The trail reconstruction in this segment and a bridge at Tanada Creek will result in a maintainable trail. Past the Tanada Creek crossing additional ditch and cap work will be done for approximately 1.5 miles at which point a descending bench cut would be constructed to access the Copper River floodplain. This second segment will be a trail re-route along the Copper River floodplain to the cutoff trail to Boomerang and then continuing south utilizing well-drained alluvial gravel soils on elevated terraces along the river floodplain, side-slope bench cuts, some well-drained soils near the top edge of the bluff, and some sections of hardened trail to access Copper Creek. This will result in a design-sustainable trail. The third segment will be improvement of existing trails in the designated wilderness south of Copper Lake. Improvements would consist of minor re-routes, drainage structures, or spot hardening. All work in designated wilderness would be done using tools that meet the minimum tool requirements. On all segments, once trail segments are reconstructed, old degraded trail segments will be closed to all ORV use to allow vegetation and wetland recovery. An easement across the private property located west of Copper Lake is being pursued to address trespass issues associated with the existing trail alignment across private land.

- Boomerang trail: From the Copper Lake trail there will be an unimproved ford across the Copper River and then improvements made to an existing ramp that climbs out of the active floodplain. No improvements are planned for the rest of the Boomerang trail. This will result in a maintainable trail section at the ramp area.

- Trail system south of Tanada Lake in the designated wilderness: These existing trails (Pass Creek and Goat Creek trails) will be improved. Improvements will consist of minor reroutes, drainage structures, or spot hardening. All work in designated wilderness will be done using tools that meet the minimum tool requirements.

- Tanada Spur trail: This new trail will be constructed along the gravel floodplain from the reconstructed Tanada Lake trail to Tanada Lake.

*Recreational ORV Use*

A proposed rule will be published in the federal register to designate the following trails for ORV use: Suslota, Caribou Creek, Trail Creek, Lost Creek, Soda Lake, and Reeve Field. Recreational ORV use on trails within the National Park (Tanada Lake trail, Copper Lake trail, and Boomerang trail) will not be proposed. Prior to trail improvements, permits will be issued for trails in fair or better condition (Lost and Trail Creek trails) and for recreational ORV use under frozen conditions on any of the designated trails. Frozen is defined as frost depth of 6" as measured with a soil probe. This condition will be announced by NPS through notices posted at the Slana Ranger Station. After trail improvements, permits will be issued for the additional trails (Suslota, Caribou Creek, Soda Lake, and Reeve Field).
Permits will include conditions to protect park resources including the following:

- Travel is only permitted on designated trails listed on the permit.
- ORVs stay on designated trails.
- If hunting or gathering, park ORVs off to the side of the trail and walk off trail. Vehicles may not be used to retrieve game off of the designated trail alignment.
- Creating new trails is prohibited.
- ORV use is prohibited in designated wilderness areas.

*Subsistence ORV Use*

Subsistence ORV use is authorized through Title 36 CFR 13.460. Proposed restrictions will be implemented through park-specific regulation or pursuant to 36 CFR 13.460(b) and (c).

On the trails in the designated wilderness (Black Mountain and the trails south of Tanada Lake), subsistence ORV users would be required to stay within identified trail corridors. The map shown as Figure 3-3 of the FEIS will be assessed in the summer of 2012 to better delineate existing trail alignments and will serve as the baseline map for existing trails in the designated wilderness. The map will be made available to the public. Once existing trails have been identified, off-trail use would be allowed 0.5 mile on either side of the existing trail for the purposes of game retrieval. For wilderness lands outside of the designated trail corridors, an area closure to ORV use would be implemented under 36 CFR 13.460.

*Non-motorized Trails or Routes*

The following non-motorized trails or routes will be constructed or identified (See Figure 2-12):

- Platinum-Soda route: Links upper Platinum to Soda Lake.
- Platinum-Reeve route: Links Platinum Creek to the Reeve Field trail.
- Wait-Nabesna route: Route from the wilderness boundary on the Tanada Lake trail up Goat Creek, up Pass Creek, down Wait Creek, along Jacksina Creek to the Nabesna Road.
- 4-Mile Trail: Constructed trail from the 4-mile point on the Nabesna Road to the Copper River.
- Mentasta Traverse: Constructed trail from the end of the Caribou trail to Soda Lake.
- Rock Creek trail: Links to the Nabesna Road up Rock Creek to the Mentasta Traverse.

A total of 42.2 miles of non-motorized routes and 20 miles of non-motorized trails would be added.

*Implementation*

Implementation of trail improvements or new trail construction may require additional NEPA compliance to address cultural resource clearance, proposed trail construction in wetlands, or the need for development of gravel sources. Subsequent NEPA compliance will be tiered off the FEIS.

Many public comments on the DEIS requested that NPS prioritize funding requests for trail improvement. Generally, projects that repair existing motorized trails and thus correct resource problem will be requested first, followed by new construction of non-motorized trails. However, because funding requests vary by cost and by different funding sources, money may become available out of sequence. The year for which we request funding for a project may not be the year we receive the money. As a result, the public may see construction of a non-motorized trail prior to fixing a degraded motorized trail because we didn't receive the money in the order that we requested it.

The park will request funding through multiple NPS funding sources, including repair/rehab, cyclic maintenance, and recreation fee funding. The park intends to prioritize funding for these trail improvements in the near-term, so that on-the-ground work can begin as quickly as possible. The park will also be exploring the potential for cooperative funding for trail improvements.

## MITIGATING MEASURES

*Monitoring*

The management intent of monitoring is to ensure that resource impacts do not expand. This will be accomplished through measuring impact indicators linked to wetlands, water quality, soils, vegetation, fish habitat, and cultural resources. Public participation in monitoring will be encouraged. Monitoring of unimproved trails, improved trails, and off-trail use would occur on an as-needed basis, or no less than every three years. The monitoring protocol is described in Appendix C of the Final EIS and included as Attachment A on this Record of Decision.

After completion of improvements, trails will be open to subsistence ORV use, subject to the monitoring standards and management actions identified in Tables 2.2 and 2.3 shown below. Prior to completion of the proposed trail improvements, all trails will be open to subsistence ORV use but would be monitored to ensure that resource impacts associated with unimproved trails do not expand. If the standards identified in Table 2.2 are not met, subsistence ORV use on unimproved trails will be subject to management actions described in Table 2-3, including site-specific maintenance, vehicle class restrictions, reduction of use, and closures. Actions will be limited to only those trails or trail segments showing increased resource impacts. On trails where degraded segments are replaced by trail reconstruction or re-routes, the old degraded segment will be closed to all ORV use to allow for recovery of vegetation, soils, and wetlands. Otherwise, travel off existing trails outside of designated wilderness will be permitted as long as resource impacts do not occur. To ensure this does not happen, the impact standards identified for off-trail use in Table 2-6 shown below will be monitored and if standards are not met impacted areas or spur trails will be closed.

**Table 2-2. Monitoring Indicators and Standards for Unimproved Trails**

| Resource | Impact Indicator | Standard And Action Level |
|---|---|---|
| Wetlands | Trail impact width | Disturbance width increases by greater than 5%. |
| | Braiding | The addition of any new braids. |
| Water Quality | Erosion sedimentation | Stream or run-off capture that causes erosion or sediment deposition that was not present in the last assessment. Based on general observation. |
| Soils | Soil compaction | Average depth of wheel ruts or track depressions within active trails increase by more than 10%. |
| Vegetation | Bare ground | Within active trails, any increase in average measured bare ground by more than 20%. |
| Fish Habitat | Stream cross-section at 15 degraded crossings | 20% or greater increase in width/depth ratio. |
| | Stream sedimentation | For salmonid spawning areas, measure cobble-embeddedness with an 80% probability of detecting a 10% or greater change. |
| Cultural Resources | Site disturbance | Any measurable impact to documented sites, based on condition assessment every 5 years. |

**Table 2-3. Management Tools That May Be Used to Manage Subsistence ORV Use in Response to an Increase in Resource Impacts**

| | |
|---|---|
| Site-specific Maintenance | Maintenance would be targeted at the trail segment where impact standards are exceeded. Maintenance could include such measures as spot hardening or short re-routes. |
| Vehicle Class Restrictions | On wet trails, NPS would consider only permitting certain classes of ORVs, such as tracked vehicles. Other considerations might include recommended tire pressures or restrictions on aggressively lugged tires, including tires on trailers. |
| Reduction of Use | The NPS would restrict access at particular times of year and on specific trails based upon surface conditions. |
| Closures | Using the appropriate authorities, the NPS would close specific trails or areas of the park to ORV use or to specific types of access until conditions stabilize or recover. Area closures would be delineated utilizing wetland mapping and identifying those areas most susceptible to resource impacts. |

**Table 2-6. Off-Trail Indicators and Standards**

| Resource | Impact Indicator | Standard and Action Level |
|---|---|---|
| Wetlands/Visuals | Braiding | Evidence of multiple parallel passes. |
| Soils/Visuals | Soil compaction | Visible ruts that are greater than 3 inches deep along any 50-foot segment. |
| Soils | Soil erosion | Any evidence of active transport erosion caused by off-trail ORV use. |
| Soils/Visuals | Soil churning, subsidence | Any large, single, deep water and mud-filled hole that alters travel. |
| Vegetation/Visuals | Bare ground | Perforation or removal of organic mat on any 50-foot segment. |
| Fish Habitat | Stream crossings | Any of the following are occurring at off-trail stream crossings: 1) use of crossing could lead to direct destruction of spawning habitat; 2) crossing is causing a direct impediment to fish passage; or 3) crossing is causing sedimentation directly or indirectly into a waterbody that is fish-bearing. |

Once trails are improved, they will be monitored to ensure that they adequately provide tread utility along a single alignment. If monitoring shows that the impact standards identified in Table 2-4 shown below are being exceeded, ORV use on improved trails would be subject to management actions described in Table 2-5 shown below.

**Table 2-4. Standards for Improved Trail Segments**

| Category | Impact Standards |
|---|---|
| Trail Width | Trail width exceeds design width specifications or original construction by greater than 30%. |
| Braiding | Braiding is occurring. |
| Surface Compaction | Wheel ruts, track depressions, or any other sort of trail surface compaction have depressed the trail tread surface greater than 6 inches below the original tread surface along any 50-foot or longer section of trail. |
| Soil Erosion | Any evidence of active transport erosion along any 50-foot or longer section of trail. |
| Mud-muck | Trail surface has a thick surface of mud greater than 8 inches deep on any segment greater than 10 feet. |
| Cultural Resources | Any measurable impact to documented sites, based on condition assessment every 5 years. |

**Table 2-5. Management Tools That May Be Used to Manage ORV Use in Response to Conditions indicating Decreased Trail Tread Utility or the Start of Multiple Alignments**

| | |
|---|---|
| Trail Maintenance | Trail maintenance would be targeted at the specific problem area. |
| Limitation of Recreational ORV Use | If degradation levels are exceeded on trails designated for recreational ORV use, number of recreational ORV permits issued for that trail would be reduced to a level commensurate with the trail's ability to maintain one alignment. Permits would be reduced by 20% annually until monitoring showed improvement. |
| Temporal Restrictions | The NPS would restrict access at particular times of year based upon surface conditions. |
| Closures | Using the appropriate authorities, the NPS would close areas of the park to ORV use or to specific types of access until conditions stabilize or recover. Area closures would be delineated utilizing wetland mapping and identifying those areas most susceptible to resource impacts. |

**Cultural Resources:** The nine existing trails (Suslota, Caribou Creek, Trail Creek, Lost Creek, Soda Lake, Reeve Field, Tanada Lake, Boomerang, and Copper Lake (to the wilderness boundary) have been surveyed for cultural resources. Any trail reconstruction or construction that occurs outside of the 50-foot surveyed corridor would be surveyed prior to construction taking place.

The trail systems in the designated wilderness (Black Mountain trail system and trail system south of Tanada Lake) have not been surveyed for cultural resources. Prior to any trail improvements or prior to designation of specific trails, cultural resource surveys would take place.

## PUBLIC AND AGENCY INVOLVEMENT

### Scoping

The Nabesna ORV Management Plan/EIS scoping period began December 21, 2007, with the publication of the Notice of Intent (NOI) to prepare an EIS in the Federal Register (Vol. 72, No. 245, pages 72754-72755). The NOI invited federal and state agencies, local governments, private organizations, recreational users, and the public to comment on areas of interest or concerns related to the action being proposed. Scoping included newsletters, public meetings held in the affected areas, and meetings with key stakeholders. During the first scoping period, comments were accepted through June 3, 2008, or 60 days after the last public scoping meeting. In spring 2008, a newsletter was mailed to the park's mailing list and to recreational ORV permit holders (a total of 360 addresses) and posted on the park's

website. This first newsletter described the planning process, the issues and objectives, and asked the public for input about trail conditions, use, and management strategies. It contained the dates and locations of the public scoping meetings and information about how to submit comments or obtain more information.

Public scoping meetings were held in Tok, Slana, Glennallen, Fairbanks, and Anchorage from March 26 to April 3, 2008. A total of 91 members of the public were in attendance. The meetings were publicized through local news and event posts and through public service announcements. NPS specialists and planners attended the meetings to answer questions and talk about planning issues. The meetings addressed planning objectives and issues, NPS regulations related to ORV use, maps of the affected area, the planning process, and a range of management options. A scoping report was published in July 2008 and made available for public review. A second newsletter was distributed in fall 2008 to update the public regarding the planning process.

Based on public scoping comments, the NPS developed a set of draft alternatives. In December 2008, an informational package describing these draft alternatives was sent out for public review and comment. The period for commenting on the draft alternatives extended through January 10, 2009, and the NPS received 30 comments. The NPS modified the draft alternatives based on these comments. The NPS distributed a third newsletter in spring 2009 to update the public regarding the planning process and to inform the public that the scope of the EIS had expanded to include subsistence ORV use on the nine trails. The NPS published a supplemental NOI in the Federal Register (Vol. 74, No. 81, pages 19589-19590) to address this scope expansion. The NOI extended the public scoping period through June 29, 2009, and solicited comments from the public, including local rural residents and residents of the park's 23 resident zone communities who engage in subsistence activities within the park.

**Agency Consultation**

The NPS recognizes the importance of the involvement of outside experts and agencies in the planning process. Therefore, the NPS has held and attended public meetings sponsored by other federal agencies, state agencies, and subsistence advisory bodies to discuss the ORV Management Plan/EIS. Relevant public meetings and other consultations are summarized in chronological order in the following list:

On February 7, 2008, the NPS met with staff from the State of Alaska (ADNR and ADF&G) to inform them about the project, the planning process, preliminary issues, and discuss the best way to coordinate during the planning process. After the meeting, the NPS entered into a cooperative agreement with ADF&G under which they conducted fish habitat assessments at all ORV stream crossings in the analysis area. The ANILCA implementation division of ADNR also reviewed and commented on the Nabesna Off-Road Vehicle Management Plan/Draft Environmental Impact Statement prior to public release.

The NPS also consulted with ADF&G biologists at various times regarding the relationships between current trail conditions, potential trail improvements, and access to moose and Dall's sheep harvest opportunities.

The NPS contacted USFWS on March 14, 2008, to initiate an ESA Section 7 informal consultation for this ORV Management Plan/EIS. The USFWS responded on March 28, 2009, in concurrence with the NPS determination that there are no federally listed or proposed species and/or designated critical habitat within the analysis area.

The State Historic Preservation Office (SHPO) received all project newsletters. Informal consultation was initiated by NPS in order to discuss a strategy for consultation. The NPS formally initiated consultation with SHPO during the review of the DEIS. The NPS and SHPO are developing a Programmatic Agreement based on implementation of the preferred alternative which will ensure the protection of cultural resources.

Between September 22 and 24, 2008, the NPS met with several groups in Washington, D.C., including representatives from the State of Alaska; Congressman Don Young's office; Senator Ted Stevens's office; Senate Energy Subcommittee on Parks; Senator Lisa Murkowski; Assistant Secretary of the Department of Interior; House Committee on Natural Resources—Subcommittee on National Parks, Forests and Public Lands; as well as the National Parks Conservation Association.

**Tribal Consultation**

The NPS has conducted government-to-government and other tribal consultation and coordination with various tribal entities throughout the ORV Management Plan/EIS process. Relevant tribal meetings are summarized in chronological order in the following list:

On January 10, 2008 and on April 21, 2011, the NPS met with members and staff of Mt. Sanford Tribal Consortium and the Cheesh-na Tribal Council. Cheesh-na is the federally recognized tribal government in the village of Chistochina.

The planning process was discussed on April 29, 2008, and March 25, 2009 at the semi-annual government-to-government meeting between the NPS and Cheesh-na.

On November 17, 2009 and again on April 23, 2008, the NPS met with members of the Mentasta Traditional Council and discussed the ORV Management Plan/EIS as part of the semi-annual information exchange prescribed by the Memorandum of Understanding (MOU) between the village and the NPS.

On May 12, 2008, the NPS met with the Ahtna Customary and Traditional Committee to brief the committee on the ORV Management Plan/EIS.

**Draft and Final Environmental Impact Statements/Public Comment**

The *Nabesna Off-Road Vehicle Management Plan/Draft Environmental Impact Statement (DEIS)* was released to the public on August 11, 2010. A Notice of Availability was published in the Federal Register on that date (Vol. 75, No. 154, pages 48721-48722). Five public meetings were held across Alaska to review the draft plan and receive public input.

During the public comment period, NPS held numerous briefings at the request of stakeholders in order to facilitate public review and comment. Briefings included the following: Citizen's Advisory Council on Federal Areas on October 21, 2010; Cheesh-na Tribal Council on October 25, 2010; Wrangell-St. Elias Subsistence Resource Commission on October 6, 2010; and Ahtna Customary and Traditional Committee on October 27, 2010. NPS personnel attended and answered questions at two meetings held by the Slana Citizen's group.

During the 90-day comment period, a total of 153 comment letters were received via regular mail, e-mail, the Park's website, and the NPS Planning, Environment, and Public Comment (PEPC) site. Some comment letters included multiple signatures. In addition the NPS received 12,587 electronic form letters from National Parks Conservation Association members. Comments were received from many organizations and interest groups, including Alaska Outdoor Council, National Parks Conservation Association, Specialty Vehicle Institute, Slana Alaskans Unite, Coalition of Retired NPS Employees, Safari Club International, Copper Country Alliance, Alaska Quiet Rights Coalition, and Residents of the Wrangells. Agencies submitting comments included the State of Alaska and the Environmental Protection Agency. Advisory Boards or Commissions included the Wrangell-St. Elias Subsistence Resource Commission, Eastern Interior Regional Advisory Council, and the Citizens Advisory Commission on Federal Areas. Native groups included Ahtna Inc. and Cheesh-na Tribal Council.

## OTHER ALTERNATIVES CONSIDERED

### Alternative 1 (No Action)

Recreational ORV use would be permitted on portions of seven of the nine trails and authorized under Title 43 CFR 36.11(g)(2). Recreational ORV use would not be permitted on the most degraded trails (Suslota, Tanada Lake, and part of Copper Lake trails). There would be no change in administration of subsistence ORV use and no trail improvements.

### Alternative 2 (Permit Recreational ORV Use)

Recreational ORV use would be permitted on all nine trails. There would be no change to subsistence ORV use and no trail improvements.

### Alternative 3 (No Recreational ORV Use Permitted)

Recreational ORV use would not be permitted on any of the nine trails. About 2.5 miles of motorized trail (part of Soda Lake trail) would be improved for subsistence ORV use or non-motorized uses. Subsistence ORV use would continue to occur but resource impacts would be monitored. If monitoring showed resource impacts increasing over time, management action would be taken. Management actions could include maintenance targeting specific resource impacts, vehicle class restrictions, seasonal closures, and area closures.

**Alternative 4 (Improve Trails, Permit Recreational ORV Use in Preserve)**

Eight of the nine trails would be improved to at least a maintainable condition through trail hardening, tread improvement, or constructed re-routes. After improvements are completed, recreational ORV use would be permitted on trails in the National Preserve (Caribou Creek, Lost Creek, Trail Creek, Soda Lake, and Reeve Field trails) but not on trails in the National Park (Tanada Lake, Copper Lake, and Boomerang trails). Until improvements are done, recreational ORV use would only be permitted on trails in fair or better condition (Lost Creek and Trail Creek trails). Subsistence ORV use would continue but would be subject to monitoring and management action if resource impacts increased.

**Alternative 5 (Improve Trails, Permit Recreational ORV Use on Improved Trails)**

Most degraded segments of the nine trails would be improved to at least a maintainable condition through trail hardening, tread improvement, or constructed re-routes. After improvements are completed, recreational ORV use would be permitted on both National Park and National Preserve trails. Recreational ORV use would not be permitted on Suslota trail (7.3 miles). Until improvements are done, recreational ORV use would only be permitted on trails in fair or better condition. Subsistence ORV use would continue but would be subject to monitoring and management action if resource impacts increased. On the trail systems in the designated wilderness, subsistence ORV users would be required to stay on designated trails. For wilderness lands outside of the designated trails, this would be accomplished by an area closure under 36 CFR 13.460(b).

## BASIS FOR THE DECISION

The basis for the decision stems from management objectives that were developed to comply with applicable Federal laws, regulations, and policies and to respond to the issues identified through internal and public scoping. The selected alternative best meets these objectives:

- *Protect soils from erosion and where possible, mitigate existing impacts to soils from ORVs*. Trail improvements would result in recovery of 374 acres of impacted permafrost soils as a result of the maintenance of one improved trail alignment and the closure of the old degraded trail segments.
- *Manage trails to be in at least a maintainable condition.* Proposed trail improvements would result in all nine of the trails in at least a maintainable condition.
- *Protect and where possible, restore wetlands, and mitigate impacts where existing routes occur through wetlands.* Trail improvements would result in the recovery of 375 acres of impacted wetlands as a result of the maintenance of one improved trail alignment and the closure of the old degraded trail segments.
- *Minimize damage to vegetation resources, and protect areas known to include rare or sensitive plants.* Trail improvements would result in the recovery of 656 acres of impacted vegetation as a result of the maintenance of one improved trail alignment and the closure of the old degraded trail segments.

- *Protect natural drainage patterns and reduce the potential for trails to act as conduits for water.* Improved trails would incorporate cross drainage, eliminate fall-line trail alignments, and incorporate integrated water control.
- *Minimize sedimentation into streams and rivers*. Proposed trail improvements would bridge, harden, or eliminate (through re-routes) all 22 ORV stream crossings identified by ADF&G as non-functional.
- *Minimize impacts to wildlife habitat.* Trail improvements would allow users to stay on single, maintainable trail alignments, thus allowing recovery of 656 acres of vegetation.
- *On existing and re-routed trails, minimize impacts to scenic quality.* Trail improvements would allow users to stay on single, maintainable trail alignments, significantly reducing the visual footprint of existing trails.
- *Minimize impacts to historic and prehistoric sites.* Cultural resource surveys will be conducted prior to any trail construction or reconstruction outside the inventoried areas of potential effect along the nine existing trail corridors.
- *Provide for recreational access to backcountry experiences while minimizing impacts to subsistence opportunities.* The proposed trail system would provide recreational motorized access to sport hunting in the National Preserve and outstanding opportunities for access to non-motorized trails in the National Park and Preserve.
- *Provide for access to subsistence resources while minimizing resource impacts.* The proposed trail improvements would provide outstanding access to subsistence resources and would minimize resource impacts by providing a single, maintainable trail alignment.
- *Provide reasonable access to designated wilderness for backcountry and sport hunting opportunities.* Improved trails in the National Park would result in outstanding opportunities for non-motorized access to designated wilderness. Motorized ground access for sport hunting opportunities in the wilderness preserve would be eliminated. Fly-in options are still available.
- *Manage eligible wilderness to protect eligibility status.* The proposed changes to the park's eligible wilderness will ensure that eligibility status is accurate.
- *Access to wilderness should protect wilderness character and the following wilderness values: a) primeval character and influence, b) natural conditions, c) imprint of man's work substantially unnoticeable, d) outstanding opportunities for solitude or primitive and unconfined types of recreation, and e) preserve wilderness in an unimpaired condition.* Recreational ORV use is not permitted on trails that access the designated wilderness. Designation of trail corridors in the wilderness for subsistence ORV users will ensure that motorized trail proliferation will not occur.
- *ORV use may be a means to access an activity or area. Within areas not designated as wilderness this will include: a) access to dispersed campsites for sport hunting; b) access to rivers, streams, or lakes for fishing and dispersed camping; c) access to rivers for float trips; d) access to jumping off points for non-motorized hiking and backpacking, sport hunting, and mountaineering; and e) access to wildlife viewing and/or photography.* Improved motorized trails that will be open to recreational ORV use in the Preserve accomplish these purposes.

- *Trails will not be managed or maintained to accommodate motorized recreational ORV use as an activity unto itself.* There are no motorized loop trails proposed and trailheads are not intended to accommodate camping.
- *Non-wilderness will be managed to provide a diversity of recreational opportunities.* After trail improvement, there will be a mix of motorized and non-motorized recreational trail opportunities in the National Preserve and outstanding non-motorized recreational opportunities in the National Park.
- *Provide for visitor opportunities that can be sustained without causing unacceptable impacts to park resources or values.* Improvements to existing trails will allow users to stay on single, maintainable trail alignments and will allow old degraded trail segments to recover.
- *Minimize impacts to the natural soundscape.* Impacts to the natural soundscape are predicted to be minor.

The NPS considered six alternative ways to meet these objectives. Based upon the analysis presented in the FEIS, public input, and discussions with Regional and Washington offices, NPS determined that Alternative 6 best meets these objectives. Repairing trails addresses and mitigates resource impacts, as well as continues to provide access that has existed in the area since before the establishment of Wrangell-St. Elias National Park and Preserve for recreation, subsistence, and access to inholdings.

The selection of Alternative 6 as the preferred alternative in the FEIS and the adoption of most of the elements of Alternative 6 in this Record of Decision is based on the following factors:

- Alternative 6 meets the objectives identified in the FEIS. Based on public comment received on the Draft EIS, Alternative 6 represents a balanced approach that allows NPS to address resource degradation through improvement of trails; continues to permit recreational ORV use on improved trails in the National Preserve; provides for a diversity of recreational experiences; and still provides access for subsistence purposes and access to private land inholdings.
- Alternative 6 represents a combination of Alternatives 4 and 5. Alternative 6 is responsive to public comment received on the Draft EIS. Specifically, NPS received a comment letter with 210 signatures representing federally qualified subsistence users in the park. This letter supported Alternative 4. Additionally, NPS received letters from across the United States supporting Alternative 4, and specifically opposed to the permitting of recreational ORV use in the National Park. Those commenters supporting Alternative 5 consisted of 41 individuals or organizations, including the State of Alaska, Alaska Outdoor Council, Specialty Vehicle Institute of America, Residents of the Wrangells, and the Citizens Advisory Council on Federal Areas.
- Alternative 6 would not rely on using 43 CFR 36.11(g)(2) to authorize recreational ORV use on improved trails in the National Park. This Alaska-specific regulation authorizes Department of the Interior agencies to issue permits for recreational ORV use on existing trails. Pursuant to that authority, recreational ORV use of the Copper Lake and Tanada Lake trails was permitted because those trails existed at the time the

park was created. Under this alternative, the proposed re-routing of the Copper Lake and Tanada trails precludes application of 43 CFR 36.11(g)(2) as that authorization is limited to existing trails. The re-routed trails were not in existence when the unit was created.

- Alternative 6 provides outstanding opportunities for non-motorized recreational access in the National Park and motorized and non-motorized recreational access in the National Preserve.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment. The NPS in accordance with the DOI policies contained in the Department Manual (516 DM 4.10) and the Council on Environmental Quality's Forty Questions, defines the environmentally preferable alternative as the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b)). The Council on Environmental Quality's Forty Questions (Q6a) further clarifies the identification of the environmentally preferable alternative, stating, "simply put, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources." Alternative 6 is the environmentally preferable alternative because it improves most trails to one maintainable alignment, thereby minimizing off-trail travel and allowing recovery of degraded soils, vegetation, stream crossings, and wetlands associated with damaged trails. By reducing off-trail travel, it also protects undocumented historic and cultural resources outside of existing trail corridors. Alternative 3 was not chosen as the environmentally preferable alternative because, while it reduces ORV use in the analysis area, it does little to improve trails. Without trail improvements, some resource impacts associated with trails are expected to continue. Under Alternative 3, moderate adverse impacts are predicted for soils, trail condition, wetlands, vegetation, and water quality/fish habitat. With trail improvement proposed under Alternative 6, these impacts are reduced to minor.

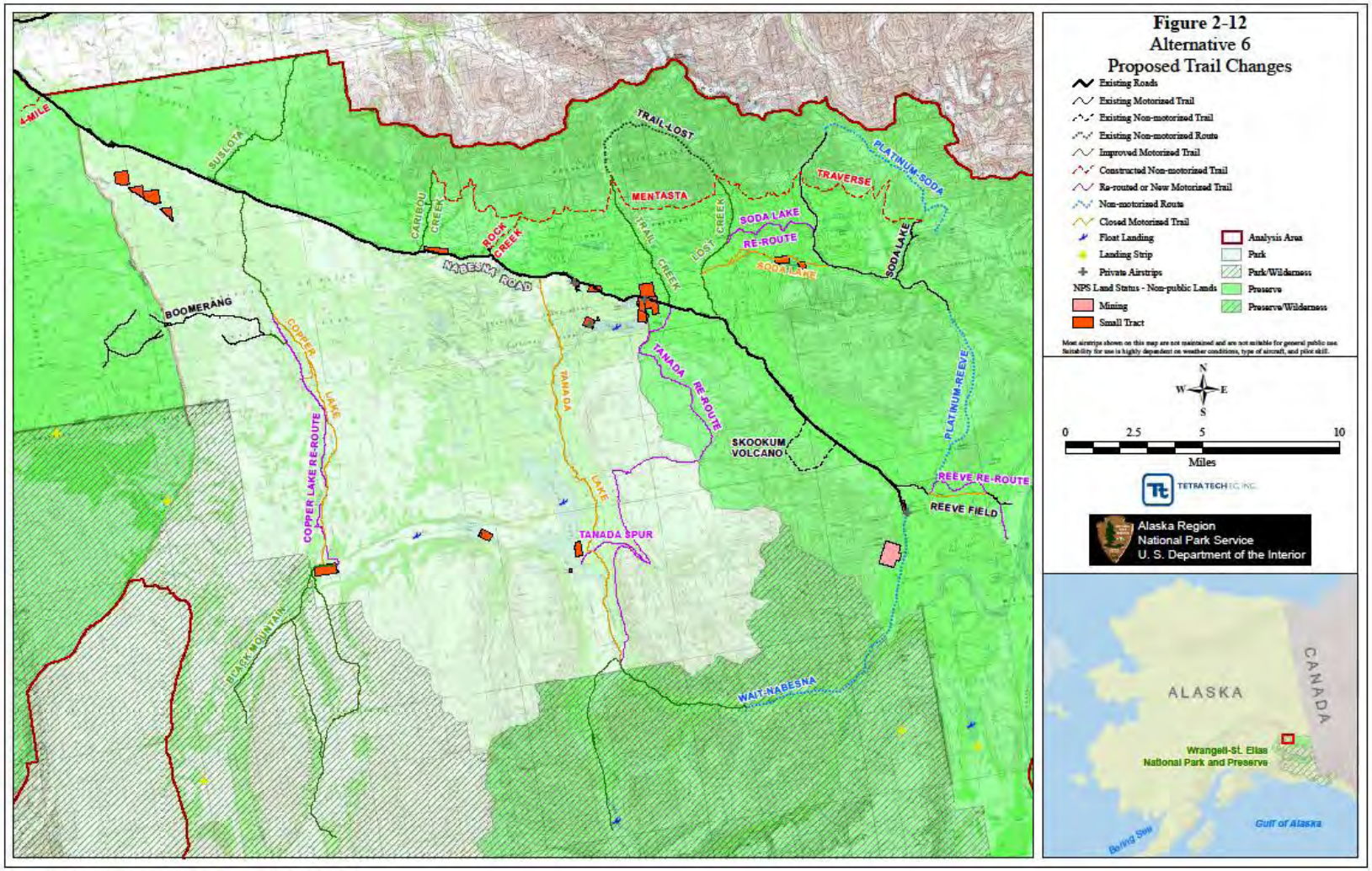
## NON-IMPAIRMENT DETERMINATION

Adverse impacts anticipated as a result of implementing the actions described in this Record of Decision on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or identified as significant in the park's general management plan or other relevant NPS planning documents; would not rise to levels that would constitute impairment. The non-impairment determination was described in Appendix A of the FEIS and is appended to this Record of Decision as Attachment B.

## CONCLUSION

Establishment of an ORV Management Plan for Wrangell-St. Elias National Park and Preserve is a necessary step to address transportation and access issues according to the

General Management Plan, as well as to address the impacts to park resources that are occurring because of ORV use in the Nabesna District. A successful Management Plan will address and mitigate resource impacts while still providing access for motorized and non-motorized users of Park and Preserve lands. All practical means to avoid or minimize environmental harm have been adopted. The actions described in this Record of Decision will not impair park resources or values, and in fact will enhance the ability of all users to enjoy park resources in a manageable and sustainable manner.

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# ATTACHMENT A
# MONITORING PROTOCOL

## *Monitoring Resource Impacts*

The following monitoring indicators and standards were developed for unimproved trails:

**Monitoring Indicators and Standards for Unimproved Trails**

| Resource | Impact Indicator | Standard And Action Level |
|---|---|---|
| Wetlands | Trail impact width | Disturbance width increases by greater than 5%. |
| Wetlands | Braiding | The addition of any new braids. |
| Water Quality | Erosion sedimentation | Stream or run-off capture that causes erosion or sediment deposition that was not present in the last assessment. Based on general observation. |
| Soils | Soil Compaction | Average depth of wheel ruts or track depressions within active trails increase by more than 10%. |
| Vegetation | Bare ground | Within active trails, any increase in average measured bare ground by more than 20%. |
| Fish Habitat | Stream cross-section at degraded crossings | Twenty percent or greater increase in width/depth ratio. |
| Fish Habitat | Stream sedimentation | For salmonid spawning areas, measure cobble-embeddedness with an 80% probability of detecting a 10% or greater change. |
| Cultural Resources | Site disturbance | Any measurable impact to documented sites, based on condition assessment every five years. |

In order to measure the indicators and standards, the following method would be used:

For each of the nine trails, twenty permanent sample plots would be established. Three trails (Tanada, Suslota, and the Copper Lake trail) had plots established in 2008, based on the following methods. In order to locate and establish random plots, the trail length (based on 2006 assessment data) is divided by 20 to determine the sampling plot distance interval between sample plots. The sampling plot distance interval is halved to locate the first plot from the trailhead. Subsequent sample plots are located using the sample plot distance interval from the first or previous plot location.

At each of the sample plots, trail impact width is measured. Trail impact width is the width of all disturbances related to trail use at the plot location, past and present. It is measured by locating the outer edges of the visually detectable braids and measuring the width in meters. Within the trail impact width there may be unaffected as well as affected areas. Braiding is measured by simply counting the number of braids within the trail impact width. Soil compaction (depth of ruts) and bare ground are measured at 20 sample points located at each sample plot. To locate the 20 sample points, trail impact width is divided by 20 to determine the sampling interval. By dividing the sampling interval in half and measuring that distance from one edge of the trail impact area, the first sample point is identified. The remaining 19 sample points are located by adding the sample point distance interval to the first sample point. At each sample point, trail depth is measured (centimeters below average undisturbed ground height) and ground cover is noted (bare ground, vegetation, litter, or rock). Ponding or presence of running water is also noted, if present. Bare ground is expressed as a percent (for example, 2 points out of 20 recorded as bare ground equals 10 percent bare ground) while soil compaction is expressed as the average depth in centimeters.

Presence or absence of erosion is based on general observations, either at plot locations or traveling to plot locations. Where erosion is observed, specific points should be recorded using GPS and described on the back of the field form for the nearest sample plot.

Stream cross-sections will be taken at each of the 15 degraded trail crossings of concern identified by ADF&G in "A Survey of Recreational Off-Road Vehicle Stream Crossings Along Trails Originating from the Nabesna Road in Wrangell-ST. Elias National Park and Preserve". At each crossing location, two cross sections will be taken, one in a representative portion of the disturbed area, and one upstream of the disturbed area. Cross-sections will be established and measured using techniques described in Chapter 6 of the USDA Publication "Stream Channel Reference Sites: An Illustrated Guide to Field Technique" (Harrelson, Rawlins, Potyondy). Baseline cross-sections should be established when the 20 trail sample plots are established and should be re-read every three years.

Presence or absence of sediment deposition will be documented by measuring cobble embeddedness at crossings that have potential for supporting salmonid spawning areas (TC-1 at Tanada Creek). Cobble-embeddedness will be re-measured every three years.

Cultural resource condition assessments would be conducted every five years on recorded sites on or adjacent to (within 200 yards either side) existing trails. General observation and surface examination would be used to detect and document any disturbance. If disturbance is noted, management recommendations will be made in order to ensure future protection of the site.

### *Improved Trails*

For improved trails, the following indicators and standards would be applied:

**Monitoring Standards for Improved Trail Segments**

| Category | Impact Standards |
|---|---|
| Trail width | Trail width exceeds design width specifications or original construction by greater than 30%. |
| Braiding | Braiding is occurring. |
| Surface Compaction | Wheel ruts, track depressions, or any other sort of trail surface compaction have depressed the trail tread surface greater than 6 inches below the original tread surface along any 50 foot or longer section of trail. |
| Soil erosion | Any evidence of active transport erosion along any 50 foot or longer section of trail. |
| Mud-muck | Trail surface has a thick surface of mud greater than 8 inches deep on any segment greater than 10 feet. |
| Cultural Resources | Any measurable impact to documented sites, based on condition assessment every five years. |

Trail width, braiding, surface compaction, soil erosion, and mud-muck would all be noted through general observation while traveling the improved trail, based on the impact standards listed above. Observer would carry a measuring tape to assist in quantifying impacts if they are occurring. If observed, the type of impact (for example, braiding) would be noted, measured, and documented using GPS and field notes.

Monitoring for improved trails should occur at 3-year intervals.

### *Monitoring Off-Trail Impacts*

For subsistence ORV use off existing trails, the following standards and indicators would apply:

**Off-trail Indicators and Standards**

| Resource | Impact Indicator | Standard and Action Level |
|---|---|---|
| Wetlands/visuals | Braiding | Evidence of multiple parallel passes that exceed 50 feet. |
| Soils/visuals | Soil Compaction | Visible ruts that are greater than 3 inches deep along any 50' segment. |
| Soils | Soil erosion | Any evidence of active transport erosion caused by off-trail ORV use. |
| Soils/visuals | Soil churning, subsidence | Any large, single, deep water and mud-filled hole that alters travel. |
| Vegetation/visuals | Bare ground | Perforation or removal of organic mat on any 50 foot segment. |
| Fish Habitat | Stream crossings | Any of the following are occurring at off-trail stream crossings: 1) use of the crossing could lead to direct destruction of spawning habitat; 2) crossing is causing a direct impediment to fish passage; or 3) crossing is causing sedimentation directly or indirectly into a water body that is fish-bearing. |

First, a baseline map will be produced documenting all existing trails in the analysis area. Monitoring for off-trail impacts may occur while monitoring unimproved or improved trails. If ORV use off existing trails is noted, observers will travel the "new" trail and look for the impact indicators noted above. If they are noted, measurements will be taken and location documented in field notes with GPS.

# ATTACHMENT B: DETERMINATION OF IMPAIRMENT

**Nabesna Off-Road Vehicle Management Plan and Final Environmental Impact Statement**

A determination of impairment is made for each of the resource impact topics carried forward and analyzed in the environmental impact statement for the preferred alternative (Alternative 6). The description of park significance in Chapter 1 was used as a basis for determining if a resource 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.

Impairment determinations are not provided for trail condition, visitor opportunities/access, subsistence, or socioeconomics because impairment determinations relate back to park resources and values. These impact areas are not considered to be park resources or values.

## PHYSICAL ENVIRONMENT TOPICS

### Soils

Management for healthy soils is not identified as a specific purpose in the establishing legislation of the park and soils are not specifically identified in the park's general management plan as being of significance. Soils are a key component to "continuous intact ecological communities that create visually diverse scenery largely unaffected by humans" which is identified as a significance statement for Wrangell-St. Elias National Park and Preserve.

Alternative 6 proposes to improve all nine trails, re-route and re-constuct very degraded and extremely degraded trail segments, and implement monitoring and management actions that would largely reverse the progression of adverse impacts to soils. Continued ORV use with trail improvements would result in minor impacts to soils on Black Mountain, Boomerang, Caribou Creek, Copper Lake, Reeve Field, Tanada Lake, Soda Lake, and Suslota trails; and negligible impacts to soils on the gravel-bedded Lost Creek and Trail Creek. The combination of small and localized construction impacts and soil recovery along closed trail segments on Copper Lake, Reeve Field, Tanada Lake, Soda Lake, and Suslota would result in minor adverse impacts to soils.

Overall, the adverse impacts to soils under Alternative 6 would be minor and would not result in impairment because improving all nine trails, re-routing and re-constructing very degraded and extremely degraded trail segments, and implementing monitoring and management actions would largely reverse the progression of ongoing adverse impacts to soils.

## BIOLOGICAL ENVIRONMENT TOPICS

### Wetlands

Management for wetlands is not specifically identified as a specific purpose in the establishing legislation of the park and wetlands are not specifically identified in the park's general management plan as being of significance. Wetlands are a key component to "continuous intact ecological communities that create visually diverse scenery largely unaffected by humans" which is identified as significant for Wrangell-St. Elias National Park and Preserve.

Alternative 6 would improve degraded trails to at least a maintainable condition and a monitoring/management program would be implemented to prevent impacts from spreading beyond the width of the trail. This would benefit wetlands and allow 375 acres of impacted wetlands to recover. Under this alternative, limited, short-term impacts would occur to wetlands during trail improvements, although the effects would be perceptible in small, localized areas and last only the duration of construction activities. Overall impacts to wetlands from the preferred alternative are minor and would not result in impairment.

**Vegetation**

Management for vegetation is not specifically identified as a specific purpose in the establishing legislation of the park and vegetation is not specifically identified in the park's general management plan as being of significance. Vegetation is a key component to "continuous intact ecological communities that create visually diverse scenery largely unaffected by humans" which is identified as a significance statement for Wrangell-St. Elias National Park and Preserve.

Under alternative 6, trail improvement and construction would directly impact 173.2 acres of vegetation in the short term but would result in long-term benefits by allowing ORV users to stay on one trail alignment, thus preventing the expansion of impacts associated with trail braiding or off-trail use. This would result in 655 acres of currently impacted vegetation being allowed to recover. Based on these factors, Alternative 6 would have a net minor, long-term, adverse impact to vegetation and would not result in impairment.

**Water Quality and Fish Habitat**

Fish resources in the region include anadromous species including Chinook and sockeye salmon, and several species of resident fish including Dolly Varden trout, Arctic grayling, burbot, whitefish, sculpin, and a few locally present additional species. Protection of fish habitat and protection of populations of fish are specifically identified as park purposes. Protected salmon habitat is identified as one of the significant resources that defines what is most important about the park's resources and values and is tied to the park purpose. Healthy fisheries are necessary to fulfill the purposes for which the park was established and are key to the natural integrity of the park.

Alternative 6 would result in minor, adverse effects to water quality and fish habitat because of trail improvements, re-routes around impacted trail-stream crossings, and other corrective actions at impacted trail-stream crossings. Effects on viability of fish populations or substantial spawning habitat degradation at multiple habitats would not occur. The percentage of analysis area aquatic habitat that could be affected would be low because most stream reaches in the analysis area are not directly crossed by ORV trails. Minor adverse effects to water quality and fish habitat would not result in impairment.

**Wildlife**

The principal wildlife concerns in the analysis area are game species; there are no federally listed threatened and endangered species present in the analysis area. Sport hunting is allowed in the National Preserve lands of the park, while subsistence hunting is allowed on both the National Park and Preserve lands. Protection of habitat for, and populations of, wildlife including but not limited to caribou, brown/grizzly bears, Dall's sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals is specifically identified as a park purpose. Unimpacted wildlife, unfragmented habitat, and native species are all identified as significant resources that define what is most important about the park's resources and values and is tied to the park purpose. Healthy wildlife habitat and populations are

necessary to fulfill the purposes for which the park was established and are key to the natural integrity of the park.

Alternative 6 proposes to improve trails to a maintainable condition and thus correct and minimize impacts associated with wildlife habitat. By closing old degraded portions of trails and allowing some habitat recovery, trail improvements would improve habitat quality for wildlife on all trails. Disturbance impacts to wildlife from ORVs would increase, and individuals could be frequently disturbed during hunting season. Disturbance under this alternative could cause some changes to the demography and distribution of wildlife populations. ORV use, and thus disturbance to wildlife, is projected to increase over current use on Copper Lake and Tanada Lake trails. ORV use also is projected to increase on the other trails. The effects of Alternative 6 on wildlife would be long-term, adverse, and moderate but populations are likely to remain viable, and the ecological integrity of wildlife habitat within the analysis area would remain intact. These effects would not result in impairment.

**HUMAN ENVIRONMENT TOPICS**

**Scenic Quality**

The existing scenic quality of the analysis area remains relatively undisturbed, except for the Nabesna road as well as the multiple trails and trail braids and development (e.g., houses, outbuildings, vegetation clearing) associated with private inholdings along the road. The surrounding scenery is remarkable with its tall peaks. "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" is identified as a park purpose. Expansive vistas and scenic wildlands are identified as significant resources that define what is most important about the park's resources and values and are tied to the park purpose. Unimpaired scenic quality is necessary to fulfill the purposes for which the park was established and is key to the natural integrity of the park.

Trail improvements and construction under the preferred alternative would result in some degree of long-term impacts to scenic values. Some of these impacts would be beneficial, such as reduction in scarring associated with degraded trails that would result from trail improvement and relocations. Other impacts would be adverse, including disturbance to viewsheds because of construction disturbance and/or the permanent trail features. As shown in the simulation for the proposed Mentasta Traverse, there would be negligible, adverse impacts to the natural landscape. Visitors to the park potentially would be exposed to temporary views of land disturbance during trail improvements and construction of the non-motorized trails which would affect up to 173.2 acres. From the air, it is anticipated that visitors also would experience a minor, short-term adverse effect. Overall, the long-term effects for both trail users and visitors traveling by air could be positive. This alternative would result in at most minor, adverse direct and indirect impacts to scenic values in the park primarily due to the addition of several non-motorized trails and a number of motorized trail improvements. These minor effects would not result in impairment.

**Cultural Resources**

Protection of cultural resources is not specifically identified as one of the park's purposes in the establishing legislation of the park. The park's general management plan does identify cultural resources as a significant resource and protection of cultural resources would be key to the natural or cultural integrity of the park.

Under alternative 6, mitigation measures would avoid direct impacts along the proposed re-routes of Copper Lake, Reeve Field, Soda Lake, and Tanada Lake trails and the development of non-motorized trails and routes. Cultural resources would benefit from keeping ORV users on one alignment. With the

anticipated impacts at the Old Suslota village site at Suslota Lake resulting from improvement of the Suslota trail, impacts to cultural resources would be moderate and adverse. With the applied mitigation of public education and signing, this would not result in impairment of cultural resources.

**Wilderness**

The Wrangell-St. Elias Wilderness is the largest unit of the National Wilderness Preservation System, encompassing 9,677,000 acres of remote and geographically diverse mountainous landscape. By establishing millions of acres of wilderness and stating that the park would be managed "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", ANILCA clearly established wilderness as a fundamental value of Wrangell-St. Elias National Park and Preserve. As such, protection of wilderness characteristics is necessary to fulfill specific purposes identified in the establishing legislation of the park.

Under alternative 6, negligible adverse impacts to the untrammeled and natural qualities of wilderness would occur related to the proposed trail activities in the designated wilderness. There would be minor adverse effects on the undeveloped quality of wilderness resource values because of the impacts associated with trail improvement. Total ORV use on trails in and leading to the wilderness would increase by 66 percent, all related to ORV use for subsistence purposes. The resulting increase in the level of use in the wilderness area would result in more opportunity for wilderness users to encounter sights and/or sounds of other users, and a decrease in their opportunities for solitude. The result would be a moderate, adverse change from current conditions for this wilderness quality. Overall, including the moderate effect on wilderness character in areas eligible for wilderness designation, Alternative 6 would be expected to result in moderate impacts to wilderness character and would result in continued conditions that represent a moderate change from natural conditions.

This moderate effect on wilderness character would not result in impairment because the preferred alternative limits the expansion of trails-related impacts by limiting off-trail subsistence ORV use.

**Soundscape**

Soundscape is not identified as a park purpose or as a significant park resource, either in ANILCA or in the general management plan for the park.

Alternative 6 would have minor, long-term, adverse direct and indirect impacts to soundscapes because more ORV noise would be anticipated in the analysis area during the summer and fall seasons. Based on the increased number of ORV trips in the analysis area, it is anticipated that the frequency of ORV noise would increase, although that change would remain localized in the areas near the motorized trails. Impacts from potential increases in airplane and vehicle noise related to bringing additional non-motorized users to the analysis area are expected to be negligible. The proposed trail improvement and construction activities would result in short-term, negligible to minor, adverse impacts on the natural soundscape. Based on the small contribution of ORV noise relative to other noise sources experienced by visitors, the overall level of impact to natural soundscapes under the preferred alternative would be determined by the expected cumulative impacts. Those are characterized as minor adverse impacts and are not expected to degrade the quality of the visitor experience or affect biological resources and would not result in impairment.

**SUMMARY**

As described above, adverse impacts anticipated as a result of implementing alternative 6 on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation

or proclamation of the park; key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or identified as significant in the park's general management plan or other relevant NPS planning documents; would not rise to levels that would constitute impairment.

## ATTACHMENT C: Corrected Figures 2-1 and 2-2 from the FEIS.

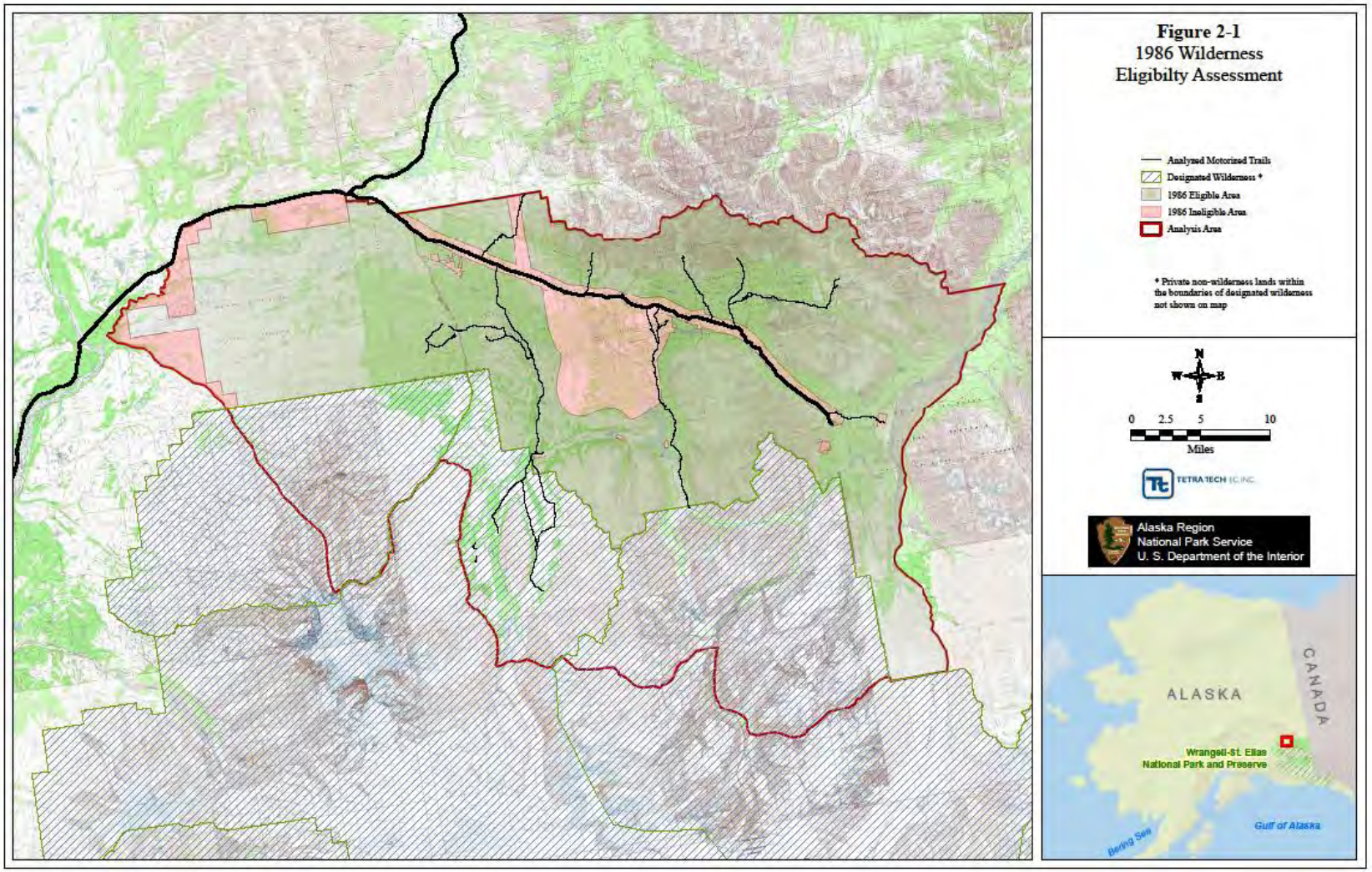
Figure 2-1
1986 Wilderness
Eligibilty Assessment
Analyzed Motorized Trails
Designated Wilderness *
1986 Eligible Area
1986 Ineligible Area
Analysis Area
* Private non-wilderness lands within the boundaries of designated wilderness not shown on map
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National Park Service
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National Park and Preserve
Gulf of Alaska
Bering Sea

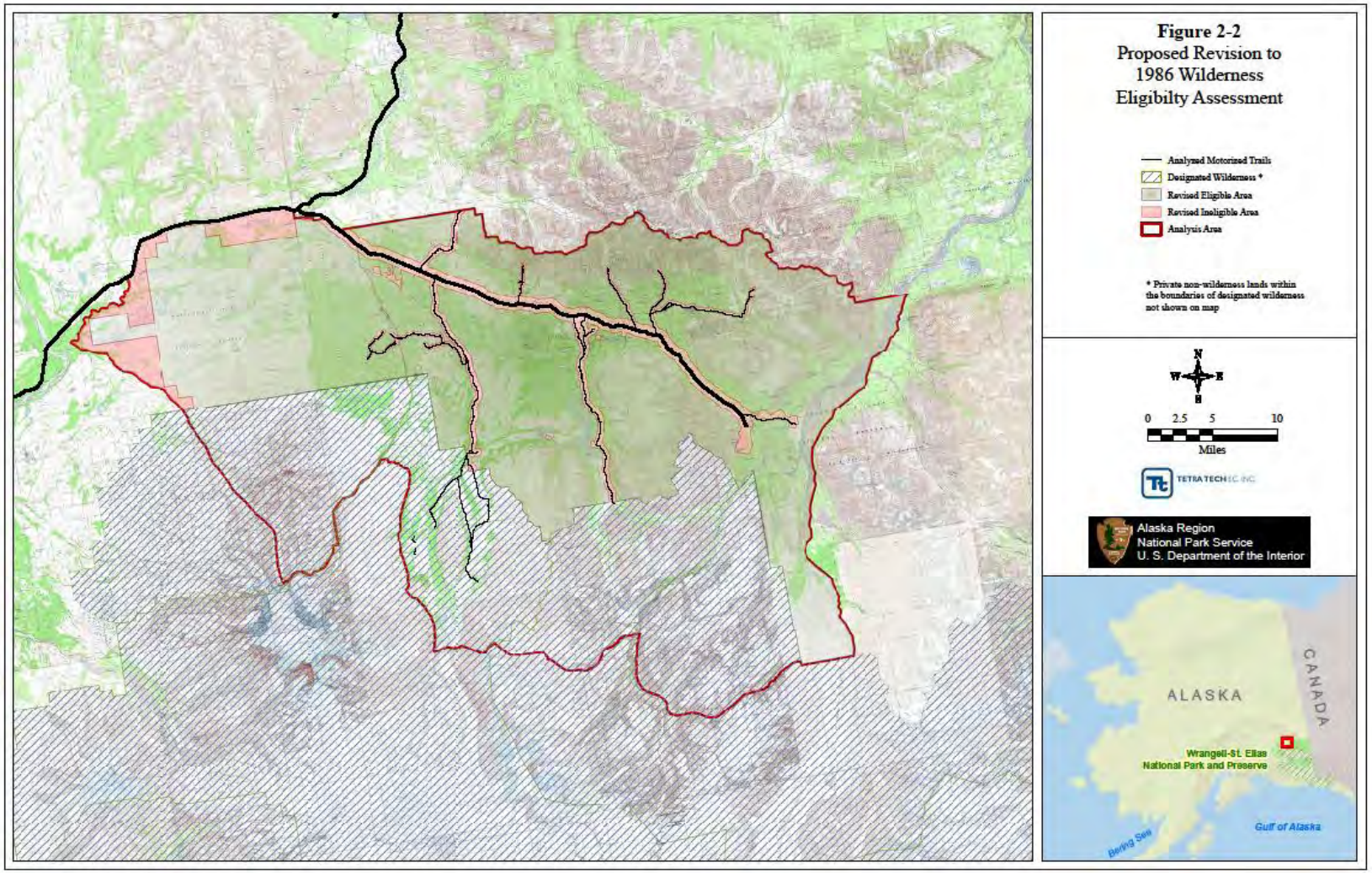
Figure 2-2
Proposed Revision to
1986 Wilderness
Eligibilty Assessment
Analyzed Motorized Trails
Designated Wilderness *
Revised Eligible Area
Revised Ineligible Area
Analysis Area
* Private non-wilderness lands within the boundaries of designated wilderness not shown on map
N
W
E
S
0 2.5 5 10
Miles
TETRA TECH EC INC
Alaska Region
National Park Service
U. S. Department of the Interior
ALASKA
CANADA
Wrangell-St. Elias
National Park and Preserve
Gulf of Alaska
Bering Sea