

FINDING OF NO SIGNIFICANT IMPACT
Cantwell Subsistence Off-Road Vehicle Management Environmental Assessment
Denali National Park and Preserve, Alaska
September 2007

The National Park Service (NPS) prepared an environmental assessment (EA) to evaluate a proposal to manage subsistence-related off-road vehicle use in the Cantwell Traditional ORV Use Area (TUA) of Denali National Park and Preserve, Alaska.

The NPS has selected Alternative 3 (NPS Preferred Alternative), with modifications, to manage subsistence-related off-road vehicle use by allowing the Cantwell Traditional Use Area (TUA) to remain open to use of ORVs by NPS qualified subsistence users for all subsistence purposes only on NPS-managed trails and routes. In addition, the NPS will work with the Federal Subsistence Board and others to implement a winter subsistence moose hunt.

An errata sheet can be found at the end of this document; the errata sheet details changes made to the EA, including alternatives, as well as responses to substantive public comments.

ALTERNATIVES

Four alternatives were evaluated in the EA.

Alternative 1, No Action Alternative

The NPS would not undertake any new actions to manage subsistence ORV use. NPS qualified subsistence users would continue to employ ORVs for subsistence purposes throughout the TUA. This alternative provides a baseline for evaluating the changes and impacts of the action alternatives.

Alternative 2

The only off-trail ORV use would be allowed only by permit for retrieval of harvested moose or caribou by NPS qualified subsistence users during the fall hunting season. ORVs could not be used in areas of the TUA that are closed for resource recovery or to protect sensitive habitat. Use of ORVs by NPS qualified subsistence users engaged in subsistence activities would continue to be allowed on NPS-managed trails and routes. The following trails would be managed by the NPS for ORV use by NPS qualified subsistence users for all subsistence purposes: Windy Creek Access Trail, Windy Creek Bowl Trail, Cantwell Airstrip Trail, Pyramid Peak Trail, and Bull River Access Trail (new construction). Both the Bull River and Upper Cantwell Creek Floodplains would be managed by the NPS for ORV use by NPS qualified subsistence users for all subsistence purposes.

Alternative 3, NPS Preferred Alternative

The Cantwell Traditional Use Area would remain open to use of ORVs by NPS qualified subsistence users for all subsistence purposes only on NPS-managed trails and routes. The following trails would be managed by the NPS for ORV use by NPS qualified subsistence users

for all subsistence purposes: Windy Creek Access Trail, Windy Creek Bowl Trail, Cantwell Airstrip Trail, Pyramid Peak Trail, and Bull River Access Trail (new construction). There would be no off-trail use of ORVs for subsistence or any other purposes within the TUA. Both the Bull River and Upper Cantwell Creek Floodplains would be managed by the NPS for ORV use by NPS qualified subsistence users for all subsistence purposes. However, unlike under Alternative 2, vegetated areas adjacent to the floodplains would be closed to all ORV use. In addition, the NPS would work with the Federal Subsistence Board and others to implement a winter subsistence moose hunt.

Alternative 4, Environmentally Preferred Alternative

Alternative 4 would be similar to Alternative 3, except for the following differences:

1. The NPS would not construct the new Bull River Access Trail.
2. ORVs would not be authorized on either the Bull River or Upper Cantwell Creek Floodplains.
3. The NPS would authorize ORV use for subsistence purposes only on the
 - a. Windy Creek Access Trail,
 - b. Windy Creek Bowl Trail,
 - c. Cantwell Airstrip Trail, and the
 - d. Pyramid Peak Trail.
4. ORV use for subsistence purposes would be authorized on these four trails *only* from one week before the beginning of the fall moose and caribou hunting seasons until the end of these hunting seasons.
5. During the summer and fall seasons, these four trails would be rezoned from “Management Area B” to “Corridor.”

PUBLIC INVOLVEMENT

To initiate this EA process, notice of the project was published on the Denali National Park and Preserve webpage and on the NPS Planning, Environment and Public Comment (PEPC) website. Scoping letters were distributed to about 60 agencies, organizations, and individuals. Three public scoping meetings also were held:

November 28, 2005	Cantwell, Alaska	5 members of the public attending
December 15, 2005	Cantwell, Alaska	8 members of the public attending
January 17, 2006	Anchorage, Alaska	2 members of the public attending

In addition to these public scoping meetings, a scoping meeting was held in Anchorage, Alaska, with members of three environmental organizations at their request. In the scoping letters and at the meetings, the NPS discussed the project purpose and need, presented an initial list of management options for comment, solicited the ideas and opinions of the public, and discussed the project EA schedule.

Subsequent to public scoping, the NPS developed a range of preliminary management alternatives. These alternatives were presented to the Denali Subsistence Resource Commission

for discussion during their bi-annual meeting on February 10, 2006. The SRC approved Alternative 2 in concept and with modifications. The Alternative 2 that is analyzed in this EA reflects the SRC's modifications.

The preliminary alternatives were presented to the public in a newsletter that was distributed to about 75 agencies, organizations, and individuals for a 30-day public comment period. The newsletter also was posted on the Denali National Park and Preserve webpage and on the NPS Planning, Environment and Public Comment (PEPC) website. Two public meetings were held to discuss the newsletter and solicit public comment:

April 4, 2006 Cantwell, Alaska 6 members of the public attending

April 5, 2006 Anchorage, Alaska 2 members of the public attending

In addition, the NPS met with three representatives of the State of Alaska on April 13, 2006. Discussion during this meeting revolved around specifics of the alternatives and suggestions for modifications.

During the scoping process and in response to the preliminary alternatives newsletter, multiple issues and ideas were brought up by the public. Comments on possible management strategies ranged from suggestions that subsistence ORV use be unlimited to recommendations that various restrictions be imposed to better protect sensitive resources. Several issues were highlighted as needing attention in the EA, including comprehensive descriptions of the existing conditions along the proposed routes and trails; what kind of monitoring strategies would be implemented to track potential resource impacts; how the plan would coordinate with the Backcountry Management Plan standards established for the area; enforcement provisions needed to implement the plan; and the need for the NPS to stipulate how it would deal with funding shortfalls when monitoring and implementing this plan.

An internal draft of the EA was distributed for review to the NPS Alaska Leadership Council, as well as to the State of Alaska. Review comments were collected and the EA was revised for public review.

The EA was issued for public review and comment from June 1, 2007, to July 31, 2007. The EA was mailed to 115 government agencies, tribal entities, interest groups and individuals. The EA was posted on PEPC and the park's webpage. The park issued a press release about the availability of the EA and the open comment period on June 4, 2007. Seven written comments were received.

The NPS held two public hearings during the public comment period:

July 9, 2007 Cantwell, Alaska 12 members of the public attending

July 12, 2007 Anchorage, Alaska 4 members of the public attending

Three verbal comments were received.

The public comments received did not change the conclusions in the EA about the environmental effects of the preferred action. The NPS responses to substantive public comments are found in the attached errata sheet.

DECISION

The NPS decision is to select a modified Alternative 3, NPS Preferred Alternative, along with the mitigating measures. A summary of the modified Alternative 3 is described here and a map of this alternative is included at the end of this document.

The Cantwell Traditional Use Area would remain open to use of ORVs by NPS qualified subsistence users for all subsistence purposes only on NPS-managed trails and routes. The following trails would be managed by the NPS for ORV use by NPS qualified subsistence users for all subsistence purposes:

- Windy Creek Access Trail;
- Windy Creek Bowl Trail;
- Cantwell Airstrip Trail; and
- Pyramid Peak Trail.

The Upper Cantwell Creek Floodplain would be managed by the NPS for ORV use by NPS qualified subsistence users for all subsistence purposes.

There would be no off-trail use of ORVs for subsistence or any other purposes within the TUA. The NPS would work with the Federal Subsistence Board, the Denali Subsistence Resource Commission, and the Regional Advisory Councils to propose a winter subsistence moose hunt, primarily in the area southwest of Cantwell Creek and into the Bull River area. In addition, hunters could continue to pack out harvested moose or caribou by foot and with horses, including game carts.

Areas off of NPS-managed trails and routes would be closed by regulation to ORV use, including the “recovery closures” as described under Alternative 2 in the EA. ORV use would not be allowed during spring breakup conditions until the NPS determines that travel would not result in damage. In the future, if subsistence ORV use must be limited even on the NPS-managed trails and routes, the NPS would prioritize use of ORVs for the purpose of getting closer to harvested moose or caribou over use of ORVs for other subsistence purposes.

The NPS would actively rehabilitate two closed trail sections to prevent ongoing degradation: water control features and vegetative plugs would be used to rehabilitate the closed trail section that extends above the campsite at the end of the Windy Creek Bowl Trail and the closed section that extends from the Windy Creek Access Trail down to the Windy Creek ravine. Once rehabilitated, these trails would remain closed to ORV use.

Alternative 3 will be modified as follows:

1) Construction of a new Bull River Access Trail and designation or construction of a Bull River Floodplain Trail/Route will be contingent upon the following: NPS working with the State of Alaska and other landowners to ensure access to the trail across non-NPS lands; and funding for trail construction and maintenance is obtained.

2) NPS would initiate the necessary steps to promulgate a special regulation that would give the Superintendent discretion to close the NPS managed trails in the TUA to ORV use until trail conditions on the aforementioned NPS managed trails have been determined to be suitable for ORV use.

3) The TUA would be managed by the NPS for the use of ORVs by the residents of the Cantwell resident zone as defined in the Denali Subsistence Management Plan and those residents of GMU 13E holding a 13.44 permit.

4) NPS will work with adjacent landowners, including agencies like the Bureau of Land Management, to address long term access to/from designated trails in the National Park.

Mitigating Measures

The following mitigation measures apply to the modified Alternative 3, NPS Preferred Alternative.

Fish Habitat: On the Upper Cantwell Creek and the Bull River Floodplains, the NPS would conduct a fish inventory of the river channels and tributaries to determine the presence of fish and related spawning and rearing habitat. If necessary, water crossings would be marked to ensure they are in appropriate places to minimize sedimentation and avoid spawning areas.

Cultural Resources: If cultural resources were discovered during ORV trail maintenance, improvement, or construction activities, the site would be protected and the activities would stop until the park archeologist can be notified and has the opportunity to evaluate the site.

Migratory Birds: Under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703), it is illegal to "take" migratory birds, their eggs, feathers or nests, except for authorized hunting activities. "Take" includes by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. The MBTA does not distinguish between intentional and unintentional take. Vegetation clearing, site preparation, or other construction activities that may result in the destruction of active bird nests or nestlings would violate MBTA. In order to avoid violations of the MBTA, bird habitat (vegetation) would not be removed during the nesting season, April 1 through July 15. After completing all the nesting vegetation removal required for the project, there would be no seasonal restriction for construction activities, even during the following nesting seasons. If any active nest were encountered at any time, it would be protected from destruction. "Active" is indicated by intact eggs, live chicks, or presence of an adult on the nest. Eggs, chicks, or adults of wild birds would not be destroyed.

Rare Plants: *Botrychium alaskaense* occurs in river flats in the vicinity of the Traditional Use Area of Denali National Park; routes along Cantwell Creek and Bull River will be located to avoid impacts to this plant species.

Rationale for the Decision

The modified selected actions will satisfy the purpose and need of the project better than other alternatives because it provides the best balance of protecting park resources and values and providing reasonable access to subsistence purposes. The modified Alternative 3 is feasible, minimizes adverse impacts to park resources and values, and provides reasonable access to subsistence purposes.

The preferred alternative was modified to reflect prudence regarding new trail construction to and along the Bull River in order to address comments received during the public comment period and to address access issues with surrounding lands. Deferring the implementation of a new access trail to the Bull River also allows the NPS to utilize the results of the ORV monitoring data to refine site-specific trail construction techniques.

Alternative 1 (No Action Alternative) and Alternative 2 would not minimize adverse impacts to protect park resources and values. Alternative 1 would set a precedent by endorsing continued dispersed ORV use away from designated trail corridors in proposed wilderness. This represents a major departure from the way ORV use management is evolving on even non-wilderness lands nationally as a result of scientific and public input. Alternative 2 would be very costly, extremely difficult to implement and enforce due to technical considerations, and burdensome for the user.

Although desirable from the perspective of minimizing environmental harm, Alternative 4 (Environmentally Preferred Alternative) was not selected because it would limit access to subsistence purposes too severely.

Significance Criteria

The modified preferred alternative will not have a significant effect on the human environment. This conclusion is based on the following examination of the significance criteria defined in 40 CFR Section 1508.27.

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The selected actions will create moderate adverse impacts to soils, vegetation (including wetlands), and wildlife. They would create minor to moderate adverse impacts to water resources in the near term and minor adverse impacts in the long term. There will be minor to moderate adverse impacts to the visitor experience moderate adverse impacts to wilderness resource values. There will be minor beneficial impacts to subsistence resources and opportunities. None of these impacts are significant.

(2) The degree to which the proposed action affects public health or safety.

The proposed action will not affect public health or safety.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetland, wild and scenic rives, or ecologically critical areas.

The park contains a major portion of the Alaska Range, one of the great mountain uplifts in North America, including North America's highest peak, Mount McKinley and some of the largest glaciers in North America. Nowhere else in America can such concentrations of wildlife be observed in as accessible a natural setting. Denali offers superlative opportunities for primitive wilderness recreation. It contains large areas with almost no trails and where evidence of human use is minimal to nonexistent. A large portion of Denali's backcountry is readily accessible to visitors who can reach the park by either highway or railroad from either Anchorage or Fairbanks. Actions proposed in this EA will not significantly affect any of these characteristics.

(4) The degree to which effects on the quality of the human environment are likely to be highly controversial.

The effects on the quality of the human environment are not likely to be highly controversial. Neither the number of comments received on the EA received during the public comment period, nor their content, indicate that a high level of controversy exists regarding the proposed action.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

It is unlikely that the effects on the human environment will be highly uncertain or will involve unique or unknown risks because trail construction and maintenance are standard land management actions.

(6) The degree to which the action may establish a precedent of future actions with significant effects or represents a decision in principle about a future consideration.

It is unlikely that the action may establish a precedent of future actions with significant effects or represents a decision in principle about future considerations because the process addressed here took over 20 years to reach a decision and no other similar process has been initiated at the park.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The action would provide ORV access for subsistence moose and caribou hunting in the TUA while protecting park resources and values. The action is not related to other actions of low significance that will amount to cumulatively significant impacts on the environment.

(8) Degree to which the action may adversely affect districts, sites, highways, structures, or

objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The degree or possibility that the action may cause loss or destruction of known scientific, cultural, or historic resources is low enough that cultural resources were dismissed as an impact topic in the EA.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

No federally designated or candidate threatened or endangered animal or bird species are known to occur within Denali National Park and Preserve, and none are anticipated to be affected by the proposed project. No species proposed for listing occur in park and preserve, nor is there critical habitat. No federally-listed endangered or threatened plant species are known from the TUA.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The action will not cause a violation of any Federal, State, or local law or requirements for environmental protection.

FINDINGS

The levels of adverse impacts to park resources anticipated from the selected alternative will not result in an impairment of park resources that fulfill specific purposes identified in the establishing legislation or that are key to the natural or cultural integrity of the park.

The selected alternative complies with ANILCA, the Wilderness Act, and 2006 NPS Management Policies. There will be no significant restriction to subsistence resources or activities as documented by the Alaska National Interest Lands Conservation Act, Title VIII, Section 810(a) Summary Evaluation and Findings.

The National Park Service has determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement is not needed and will not be prepared for this project.

ATTACHMENT A

NPS RESPONSES TO PUBLIC COMMENTS AND ERRATA for the Denali National Park and Preserve Environmental Assessment for Cantwell Subsistence Off-Road Vehicle Management

This attachment amends the subject environmental assessment (EA) and provides NPS responses to public comments.

PUBLIC COMMENTS

The NPS received ten public comments: three from private individuals (PI), one from an agency, one from a Native Corporation, and five from organizations.

The NPS has read and considered all comments received. Responses to substantive comments are provided below. A substantive comment is defined as one which leads the NPS to: (1) modify an alternative, including the proposed action; (2) develop and evaluate an alternative not previously given serious consideration; (3) supplement, improve, or modify the environmental analysis; or (4) make factual corrections (CEQ NEPA Regulations 1503.4).

State of Alaska

We are concerned that the general public, adjacent landowners and perhaps the affected subsistence users themselves may not be fully aware of the potential implications of the lack of legally-reserved trails that connect legal public access points (e.g., the community of Cantwell or the George Parks Highway) to these remote "trailheads" at the southern boundary of the park. In not providing a land status map or explanation of the existing pattern of access, the tenuous legal status of these trail connections is not apparent. For example, the EA does not address what would happen if an existing landowner restricted general access to areas not otherwise accessible.

Chapter 4 analyses are based in part on the assumption that "ORV use has been unlimited on State land adjacent to the TUA, and ORVs are likely to continue to be allowed on these lands in the future." However, lands currently owned or selected by the State may be conveyed out of state ownership, such as those lands selected by the Denali Borough or subject to a state land sales program.

NPS Response: In the final decision, construction of a new Bull River Access Trail and designation or construction of a Bull River Floodplain Trail/Route will be contingent upon the NPS working with the State of Alaska and other landowners to ensure access to the trails across non-NPS lands. The NPS discussed this concern about access at public meetings during the EA process. The current use pattern is that landowners adjacent to the park allow, and support, ORV access for subsistence use. This has been the pattern

for decades and it is reasonable to expect it to continue for the purposes of impacts analysis.

ORV use on state lands is not unlimited. The State's "Generally Allowed Uses" requirements at 11 AAC 96.020 do not allow resource damage and confines users to trails whenever possible. These potential off-park changes in land ownership and use restrictions could greatly impact subsistence access to public lands, particularly in the long term. While the present assumptions may be effective in the short term, we urge the final decision document address what long-term measures (e.g., working with landowners to designate trails) the Service plans to take to continue providing local rural residents with reasonable access to subsistence opportunities in the park. We also request the final document address if and how the current lack of legal trail connectivity affects the expenditure of park funds to maintain or improve designated ORV trails on park lands.

NPS Response: The FONSI states that the NPS will work with adjacent landowners to ensure effective long-term access to/from designated trails in the National Park. The NPS expects that the State of Alaska will continue to manage adjacent lands to facilitate access for federally qualified subsistence users. NPS is willing work with the State to identify important areas to retain in public ownership or where trail access could be reserved prior to future land disposals.

Due to the large acreage of ANCSA selections outside the TUA, we encourage the Service to work with the Bureau of Land Management (BLM) on the reservation of 17(b) easements that facilitate access to the designated trails and routes during the nomination process accompanying approval of lands for conveyance. These easements can reflect existing conditions (i.e., 25-foot trails) to ensure continuous subsistence access to the park. Working with BLM to relocate the existing easement E1N 7a to eliminate trespass concerns over private lands may also facilitate access to the more heavily-used subsistence areas near the community.

NPS Response: The FONSI added clarifying language to indicate the NPS commitment to coordinate with adjacent landowners and other agencies such as the BLM to ensure access to the National Park. With respect to the 17(b) easement, the NPS has already been investigating land ownership, location of the easement, and the possibility of relocation or establishment of a new public easement.

Section 4.5.2 General Wildlife Impacts, contains assumptions concerning wildlife management that are not fully supported in the analysis. We recognize that moose and caribou populations can decline through poorly managed harvests. Without supporting documentation, however, we question the EA statement that reductions in overall numbers of animals may lead to decreased fitness of populations. Wildlife managers respond to actual or anticipated changes in overall harvest levels, either with short-term, in-season tools or through ongoing state and federal regulatory processes. We request the final decision document consider the authorities and responsibilities of the State and the Service in the management of wildlife populations and in regulating subsistence hunting opportunities in the park additions and adjacent areas. Also, the discussion of the Coltman data does not seem applicable to the paragraph (or the EA) since its focus is on trophy hunting of sheep, not subsistence hunting of moose and caribou.

NPS Response: It is generally accepted that moose and caribou populations can be reduced by hunting. At some point, reduction in numbers of animals could lead to decreased fitness of moose or caribou populations. The NPS believes all data cited in the EA are relevant to this topic. However, the ERRATA clarifies that moose and caribou populations in the TUA are contiguous with larger populations on adjacent state and federal lands. The protection of caribou in GMU 20C, and the regulation of moose and caribou harvest in GMU 16B, should ensure that reductions in numbers would probably not be significant or persistent enough to affect the long-term survivability of populations in the TUA. Under an alternative like Alternative 1, however, which predicts that moose and caribou harvests could double over current numbers, population parameters could change to a point that the population in the TUA may no longer be considered natural and healthy.

The NPS will consider the appropriate authorities and responsibilities of the State and the National Park Service in the management of wildlife populations and in regulating subsistence hunting opportunities.

We question why a discussion of the impacts of helicopter noise on large mammals is pertinent to the analysis of subsistence hunting in the TUA unless the Service expects to conduct a significant monitoring program with helicopters, an action that is not explicitly anticipated in the EA. The ANILCA Section 810 analysis, states the Service would utilize fixed wing aircraft for monitoring during the fall hunting season.

NPS Response: A discussion of impacts of helicopter noise on large mammals is pertinent to the analysis because the NPS assumes additional helicopter use from monitoring. The monitoring program and a description of anticipated helicopter use is located in Appendix 2: Monitoring Strategies for Management Alternatives and Appendix 3: Implementation Cost Estimates for Management Alternatives in the environmental assessment.

The EA asserts that because there are 50 households in Cantwell that hunt moose, all may hunt in the TUA using either ORVs or snow machines under the various alternatives. This assumption seems unrealistically high and either needs to be supported with evidence or qualified as a potential change in hunting practices. We agree that some additional use may be expected, as area residents resume hunting closer to home under clearer guidelines, but others will likely continue to use areas outside the TUA with which they are more familiar. More importantly, monitoring of actual hunting patterns over the next few seasons can ascertain whether or not there is an increase in the number of Cantwell households using the TUA.

NPS Response: The NPS agrees that it would be important to monitor actual hunting patterns over the next few seasons to determine how many Cantwell households are using the TUA. For purposes of the analysis, NPS assumes the 50 households that hunt would go to the TUA first because: a) The 2005 NPS Cantwell Subsistence Traditionally Employed ORV Determination removed any ambiguity about whether ORV use for subsistence purposes is authorized in the TUA; b) The TUA is right next to Cantwell; c)

Subsistence hunting in the TUA is unaffected by competition with non-local hunters (unlike on lands outside the TUA); d) There would be continued improvements in the reliability of the ORVs themselves; and e) The TUA is open earliest and latest for moose. In the EA these assumptions are prefaced with the following: "More subsistence moose hunters would be expected to use the TUA than in the past," which implies that this would be a change from previous years.

The evaluation of the proposed winter moose hunt described in Alternatives 3 and 4 is limited in scope and based in part on an apparent desire by the Service to shift ORV use to snowmachines. While a winter hunt in theory would provide additional opportunities for hunters, the preferences of Cantwell residents and biological consequences must be given careful consideration. According to the EA, Cantwell area residents prefer and have traditionally participated in a fall hunt (see page A-4, third full paragraph); however, there are biological consequences to wildlife populations with a winter hunt. Additional evaluation of population dynamics, seasonal movement of animals in and out of the area, physical condition of animals in the winter post rut, added stress of a directed hunt, and their increased vulnerability to hunting using snowmachines are elements that managers and biologists must consider when evaluating the viability of a winter hunt. After careful consideration of these additional factors, the biological impacts of such an action could very well offset the added opportunity of a winter hunt.

NPS Response: The ERRATA states that the NPS would consider these factors when proposing any winter hunt that is approved through the Federal Subsistence Board process.

We therefore request the Service initiate cooperative studies with the Alaska Department of Fish and Game (ADF&G) to evaluate area moose population. If, based on the results of the studies, the Service chooses to recommend a winter hunt, to avoid potentially conflicting management decisions (E.g. Alaska Board of Game management of fall hunts on adjacent state lands and the Federal Subsistence Board management of winter hunts in the TUA) and consistent with the Master Memorandum of Understanding between the Service and ADF&G, we request the proposal be submitted initially to the Alaska Board of Game for consideration.

NPS Response: NPS has cooperated previously with ADF&G in coordinating moose surveys in GMU 16B, so that surveys can be conducted concurrently or close together in time, obviating concerns about moose moving between state and federal lands in the time between surveys. The same strategy will be undertaken in GMU 13E; NPS biologists will attempt to schedule moose surveys concurrently with adjacent ADF&G surveys. To address conservation concerns, NPS will utilize state and/or federal expertise and processes as appropriate when proposing a winter hunt.

In addition, a majority of the references to a winter hunt state clearly the opportunity is tentative and pending a process that is outside the scope of the Service's authorities. There are certain passages that may be misleading (i.e., "there would also be a winter hunt," "a winter hunt would be implemented") but the overall intent appears to accurately portray the tentative nature of a winter hunt. In view of the conservation concerns associated with a winter moose hunt in the TUA, there is no guarantee that the Federal Subsistence Board or the Alaska Board of Game

would be justified in establishing one. Therefore, the manner in which the winter hunt is factored into the analyses, often without affirming this qualification, greatly reduces, if not negates, the mitigating value. Of particular importance is the lack of consideration for the consequences of a winter hunt not occurring, in both the short and long term. The EA states "A winter hunt is an important component of the overall long-term beneficial impacts resulting from the management actions in Alternative 3." Due to the very tentative nature of the winter hunt, the overall impacts to subsistence and wildlife in Alternatives 3 and 4 may be very different than what is currently portrayed. We strongly recommend taking this into account when making a final decision.

NPS Response: The following language appears at the beginning of the impact analysis for wildlife under Alternatives 3 and 4, the two alternatives that contain a winter hunt component: "The NPS would work with the Federal Subsistence Board, the Denali Subsistence Resource Commission, and the Regional Advisory Council to implement a winter subsistence moose hunt, primarily in the area southwest of Cantwell Creek and into the Bull River area." The decision specifies that a winter hunt would need to be carefully examined and authorized by authorities other than the NPS. In the event that the winter hunt is not approved for biological or other reasons, the NPS recognizes that this mitigating action would not be factored in. The ERRATA adds the additional clarification that the NPS will cooperate with the State to gather additional information, such as hunt preferences of Cantwell residents and biological consequences, when proposing a winter hunt. The NPS will continue to cooperate with local residents and state and federal land managers to explore adjustments that may help facilitate subsistence harvest opportunities.

The Chapter 4 analyses also appear to underplay the importance of the social aspects of subsistence opportunities. Potential impacts of the alternatives on resources appear to take priority over known impacts to subsistence users. For example, in the impact analysis for Alternative 1, impacts to subsistence resources are the primary reason for concluding there would be major negative impacts. Additionally, certain elements have been left out of the analysis that may be important to the community, such as the increased risk to public health and safety and loss of access for additional subsistence activities. For example, subsistence users have identified distances greater than 1/4 mile as being a burden regarding pack-out. This is especially relevant for families hunting together and for less-mobile users. It also increases the potential for unwelcome bear/wolf-human interaction. However, the EA assumes that most hunters would be able to hike at least 1/2 mile to pack-out a moose, and analyzes a 1/2 to 3 mile one-way retrieval distance in Alternative 2.

NPS Response: The NPS believes that these factors have already been considered in the evaluation of impacts to subsistence use, particularly under the subheading, "Way of Life."

Most additional subsistence activities can be provided without requiring the use of ORVs; however, the EA does not address subsistence hunts for bear that, though not common, tend to occur in spring. If the local users consider these are important issues, additional consideration by the Service may be warranted. We encourage the Service to consider all options to allow use of

ORVs for all facets of subsistence hunting to the greatest extent possible, while still protecting habitat and other values.

NPS Response: This alternative action was not considered because, in past communications with the Denali Subsistence Resource Commission, it is the use of ORVs for retrieval of moose and caribou that has been their concern, not bears or other game animals. In fact, in the February 2006 Denali SRC meeting, SRC members specifically requested that ORV use for retrieval of harvested bears not be allowed.

Ahtna, Incorporated

We support the Native Village of Cantwell's position on Alternative 2. The greater natural resource is the federally qualified subsistence users, who hunt within the park, and they are being restricted to hunt on a few of the existing trails, and limited to off-trail use. Without the natural balance of hunters and wildlife to sustain a population between them, the population of moose and caribou will not be maintained.

NPS Response: The NPS agrees with this concern and believes that the final decision reflects the needs of federally qualified subsistence users while also protecting resource values.

Organizations and Individuals

Traditionally Employed Determination

1) The Park Service has arbitrarily determined that any form of surface transportation existing ten years prior to 1978, meets the basic qualification of being "customary and traditional" for purposes of subsistence access. This determination is questionable and would seem to set a standard that will very likely be extended to parklands beyond Denali. (Coalition of National Park Service Retirees)

NPS Response: The NPS made a traditionally employed determination, not a customary and traditional determination, which involves different criteria. The NPS believes that the Determination is accurate in that ORVs were traditionally employed in the TUA.

2) NPS has asserted that the opening of national park lands to ORV use represented by this EA is very specific and limited to qualified subsistence users in the TUA. We understand that the Traditional Use Finding has already validated the use of ORVs for subsistence in the TUA, but it is important to remind NPS that off road vehicles were never specifically mentioned in ANILCA as "other means of surface transportation." (Section 811(a)) We understand that ORV use has come to be recognized as such over the years, subject to detailed analysis of traditional use practices. The Final EA should stress the limited nature of this finding and restate that the park in general is closed until opened to ORV use. (Denali Citizens Council)

NPS Response: The EA states that in July 2005, the NPS published the final "Cantwell Subsistence Traditionally Employed Off-Road Vehicle Determination" which opened the entire 32,159 acre Cantwell traditional ORV use area to the use of off-road vehicles for

subsistence purposes by NPS qualified subsistence users. The NPS is proposing this current action to assure subsistence ORV use in this area is proactively managed to minimize adverse impacts to the resources and values for which the park was established while also providing reasonable access for subsistence purposes.

3) Most so-called "historic ORV access routes" on parklands were originally winter haul trails or ice roads developed for the transport of heavy equipment to mining sites or for other commercial purposes. These trails were rarely used during the summer months due to the instability of the soils and difficulty crossing streams. A small number of local residents with access to tracked or large, 4-wheel drive vehicles may have also used these winter trails for hunting and hauling logs and firewood, but this was usually done when the ground was frozen. It was not until the advent of the small, personal 4-wheeler ATV in the early 1980s, that ORVs became widely used in rural areas for hunting and country travel (Bane, 2001). (Coalition of National Park Service Retirees)

NPS Response: The NPS believes that the Determination is accurate in that ORVs were traditionally employed in the TUA.

Resident Zone Status

4) The subsistence resident zone status of Cantwell should be reexamined and possibly replaced by individual subsistence use permits for those residents who do have historic ties to subsistence on parklands. To grant community-wide special ATV access privileges to large number of residents who do not have direct ties to traditional subsistence is questionable. (Coalition of National Park Service Retirees)

The Cantwell Resident Zone, an area of 3 mile radius around the Post Office, has been established in the EA as the legal basis for determination of eligibility for subsistence access into the TUA. Although resident zones are legal entities, Congress recognized that they might have to be revisited as population trends and the composition of the zones themselves changed. The Report No. 96-413 of the Committee on Energy and Natural Resources, U.S. Senate, to accompany H.R. 39, November 14, 1979, p. 170, in regard to resident zones, stated that: "subsistence hunting is consistent with the protection of park and monument values only so long as such zones remain composed of primarily of concentrations of residents with an established or historical pattern of subsistence uses of wildlife. The direction of the evolution of many rural communities within resident zones is as yet undetermined. As a result, the composition of residents within a particular community may alter substantially in the future. If so, the Committee expects, and section 203 and Title VIII so authorize, the National Park Service to protect unit values by determining eligibility of residents of communities within previously designated zones through implementation of an individual permit system." (Denali Citizens Council, Sierra Club)

This EA is incomplete until it includes adjustment of the Resident Zone as a legitimate tool to be used in avoiding negative impacts from ORV access in the TUA. The NPS erroneously assumes that the status reexamination would not significantly change the impacts from use of ORVs in the TUA. If Cantwell were found to be no longer eligible for resident zone status, the subsequent individual subsistence permit system would likely result in minimizing impacts to park resources and values due to a significant reduction in the number of qualified subsistence

users, and hence a commensurate reduction in the number of ORVs deployed in the subsistence hunts by the genuine customary and traditional subsistence users. (Denali Citizens Council, Sierra Club)

NPS Response: This action was addressed in the EA and dismissed from further consideration. This action would re-examine the resident zone status of Cantwell. Under this action, the resident zone could be replaced by a system of individual subsistence use permits for those residents who have customarily and traditionally engaged in subsistence uses in the park without using aircraft as a means of access. The EA states that this proposal would not significantly change the present need to manage, or change the impacts from, use of ORVs by qualified subsistence users in the TUA. It also would require a lengthy regulatory process with an uncertain outcome.

While examining resident zone status of Cantwell is beyond the scope of this EA, the concern is valid and the comments raise a good point. The issue of re-evaluating the resident zone status of Cantwell would need to be considered in a separate public process.

5) The EA defines qualified users as those who: “(1) are local rural Alaska residents *and* have a positive customary and traditional use determination for the species and wildlife in the management unit where they want to hunt *and* who permanently reside in the Denali National Park resident zone (are residents of the park, Cantwell, Nikolai, Minchumina, or Telida); or (2) are local rural Alaska residents who have been issued a 13.44 subsistence use permit by the superintendent of Denali National Park and Preserve.” Part (1) of this definition appears to limit the number of subsistence users to a group smaller than the number of folks who actually live in the resident zone community, since the requirement of having had a traditional use determination is added to this definition. However, we note that the 2007/2008 Federal Subsistence Wildlife Regulations state that “subsistence users must be local rural residents of NPS areas,” adding no other qualifier. In addition, the Federal Subsistence regulations appear to indicate that simply by residence in a resident zone, rural users in Unit 13 already have a customary and traditional determination. Please clarify whether or not Part (1) is meant to reduce the number of hunters eligible for a permit to hunt moose and caribou to a smaller group of users with a unique, multigenerational pattern of subsistence use in the TUA, or whether the broader notion of a customary and traditional use determination as forwarded in the Federal Subsistence regulations is being used. If the former, you have, in effect, limited access as ANILCA would have intended, an action that we wholeheartedly support, and that, we think, will include the bulk of those hunters who have petitioned the National Park Service for the ability to hunt moose and caribou using ORVs. Part (2) of the definition could potentially fold in people who do not live in a resident zone and do not have a history of pre-ANILCA use, since there is at least one individual who qualified for this permit on the basis of post ANILCA use. The EA needs to explain how the granting of 13.44 permits will preserve the intent of ANILCA, if this is used as a standard for determining who can use ORVs for subsistence. The Final EA must show how NPS will prevent the inevitable growth in population of rural communities and resident zones from triggering ORV use that is beyond the intent of ANILCA. On page 4-34, the EA discusses the “50 Cantwell households that hunt.” From what data were these numbers pulled? They seem large, when considering the input from the Traditional Use Finding and the population of Cantwell in 1980.

Given the definition of “qualified subsistence user” given in the EA, are there truly 50 qualifying households? (Denali Citizens Council)

NPS Response: The NPS must use best available information to make assumptions upon which to base the impact analyses. In this case, NPS staff reviewed harvest data from the Alaska Department of Fish and Game, which indicated that about half the households in Cantwell (50) hunted moose, and made the assumption that there is potential for that many households to hunt for moose in the TUA .

Level of NEPA Analysis

6) Throughout the discussion of ORV use in the Cantwell area, we have urged NPS to treat this process at the EIS level of analysis. If NPS must choose any alternative that includes the building of an access trail into the Bull River or off-trail retrieval of moose and caribou, further analysis at the EIS level, and further consultation with the State of Alaska, will be necessary. (Denali Citizens Council, National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: According to Director’s Order #12, an EA is appropriate when the significance of impacts is unknown. One of the purposes of doing an EA is to determine whether an EIS is necessary. NPS has made a decision that does not result in significant impacts and therefore an EIS is not needed. In addition, the NPS did considerably more scoping and public involvement throughout the process than is required for an EA.

Purpose and Need

7) In rereading the July 2005 finding, the whole of the discussion is about moose and caribou hunting. That is the subsistence activity for which residents of Cantwell successfully showed a tradition of wheeled vehicle access that went back more than one generation. The first line in the Chronology of ORV Use section (page 55), begins with, “The use of ORV technology in accessing and harvesting wildlife resources....” The finding supported subsistence hunting access, but that distinction isn’t abundantly clear in the EA. Alternative Four hints at it with its timing restrictions tied to the beginning of moose and caribou hunting seasons. But 2.3.2 (Alternative 2) uses the term “all subsistence purposes” and that descriptor is repeated in 2.4, the introduction to alternative 3. In talking with park planning staff, they indicated the purpose of access was for moose and caribou hunting. Yet the language in the EA could imply that ATVs can be used for all subsistence activities (for example collecting firewood or going berry picking) all summer long.

We feel there should be some clarification that while Title VIII provides access for traditionally employed subsistence purposes, the subsistence purpose used in the finding and desired by the residents of Cantwell is clearly access for moose and caribou hunting only. Moose and caribou hunting access is the preponderance of description used in the EA. And that distinction is important in that it helps establish the reasoning for some of the key management parameters suggested by both the Park Service and us. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: While the SRC request was for hunting moose and caribou, the conclusion in the Determination says “for subsistence purposes.” The language in Alternatives 2 and 3 is correct as written.

Bull River Access Trail

8) There are four reasons to leave out new construction of a Bull River trail: a. New trail construction in Denali National Park backcountry violates long standing policy. b. New trail construction in Denali National Park impairs Wilderness eligibility and integrity. Construction of a new trail on the Bull River most definitely constitutes an impairment of Wilderness eligibility. We encourage that this action be removed from the preferred alternative. c. The traditional use finding for National Park lands on the Bull River is weak in comparison to the finding for Windy and Cantwell Creek lands. d. Impacts to adjacent state lands have been inadequately analyzed. In fact, in the Preferred Alternative NPS creates a trailhead at the boundary to Denali National Park by building the Bull River access trail where none existed before. This will encourage use on nearby state lands, and likely some of that use will occur on soils where NPS itself would never authorize trail building. As such, NPS action will act to encourage damage on adjacent public lands. Such action requires analysis at the EIS level, and further consultation with the State of Alaska to develop a cooperative plan. The current EA provides insufficient analysis of this important and truly unprecedented federal action. (Denali Citizens Council)

NPS Response: The NPS disagrees with the reasons stated above for omitting the Bull River Access Trail from the final decision. The selected action has been modified, making trail construction contingent upon ensuring access to the National Park across non-NPS lands, and adequate funding for construction and maintenance.

9) While Alternative 4 is described as the environmentally preferred, we find that the best alternative to protect wilderness values is Alternative 3 (modified) as presented on page A-43 of the EA in the Minimum Requirements Decision Guide. We feel construction of the Bull River Trail would require a level of environmental impact that requires an Environmental Impact Statement (EIS). Trail construction would have a substantial impact on the landscape, including the addition of synthetic materials to stabilize the trail (e.g. Geoblock and puncheon), substantial clearing, grubbing and cut and fill of slopes. The majority of the slopes needing cutting and filling are between 15-45% and some on slopes greater than 45%. The steepness of these slopes and the alignment with the contour needs to be addressed in detail, provided for in an EIS, to insure that the actual trail route would be sustainable. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The selected action has been modified, making trail construction contingent upon ensuring access to the National Park across non-NPS lands, and adequate funding for construction and maintenance. The NPS agrees that the trail should be designed to minimize environmental harm. Potential impacts from this project are analyzed in the EA and impacts were not determined to be significant, so an EIS is not required.

10) The cost of the trail (up to \$325,000) comes at a time when the park is facing severe budget shortages that are identified as about \$1.3 million by 2011. Other trails evaluated in this EA already exist and the impact can be measured and observed and the level of monitoring and potential maintenance can more readily be anticipated. A totally new trail has many unknowns, both in terms of environmental impact and cost. Construction of the Bull River trail would be expensive and continual maintenance of synthetic materials and trail marking would be required. Rivers can change flow throughout the season in response to storm events, and so the route is highly likely to change and needs to be marked more than once a year. A cost/benefit analysis of installing and maintaining this trail that is open to a limited number of users needs to be completed and presented in an EIS. For these reasons, we don't support inclusion of the Bull River Trail in the final Record of Decision. And with no Bull River Trail, there can be no access to the upper Bull River. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The selected action has been modified, making trail construction contingent upon ensuring access to the National Park across non-NPS lands, and adequate funding for construction and maintenance.

11) Should the Park Service choose to pursue the Bull River access trail in a future EIS, that analysis must also include additional discussion of the use of the Bull River prior to 1980. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The NPS believes that use in the Bull River prior to 1980 was adequately addressed in the Determination.

12) I do not support within Alternative 2 any new trail construction. I see that backfiring down the road and bringing to close ORV use altogether. You start making access too easy, whether it be from the people here, I suspect from others to come, the abuse is going to go right back to how it was, and that's not going to be good for anybody. (PI)

NPS Response: The final decision reflects prudence regarding new trail construction, focusing instead on existing trails and routes.

Timing

13) We would further modify Alternative 3 to include the timing restrictions for trail use set around the beginning of the fall hunting season as detailed in Alternative 4. Limiting trail use, as discussed in Alternative 4, further protects the wilderness values of the area by keeping the trails ORV-free during the summer months up to one week before the opening of the fall moose and caribou season, which is usually around August 1. Should the Park Service choose not to adopt the timing restrictions in Alternative 4 in the final Record of Decision, it absolutely must include a determination process for when the trails are dried out enough to support ORV activity in the late spring/early summer. Similar to minimum snow levels before snowmobiling is allowed, a determination needs to be made about the condition of the trails after break-up and a similar opening determined by actual trail conditions. As we commented in April 2006, we are glad to

see that the EA says “ORV use would not be allowed during spring breakup conditions until the NPS determines that travel would not result in damage,” but we did not see any discussion of what that determination would consist of. What criteria will be used to make the “ORV use open” determination? We suggest that at minimum you include insuring that there is no standing water greater than 1 inch on stable soils and that trail segments crossing unstable, saturated soils are dry enough to support ORV use without reaching the minimum Warning Degradation Level criteria of 2” depression compared to adjacent soil. By properly restricting ORV use during spring breakup, during the non-hunting season and when ORV trails are too wet to support ORV traffic, the Park Service will reduce the monitoring needed to maintain trails, reduce the number of trails that need to be managed in response to degradation, and will preserve the trails for their intended use during the moose and caribou hunting seasons. (Alaska Quiet Rights Coalition, National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The NPS agrees that trails should be in good condition before allowing ORV use on them. The selected action has been modified to include the following: the NPS would initiate the necessary steps to promulgate a regulation that would give the Superintendent discretion to close the NPS managed trails in the TUA to ORV use until trail conditions have been determined to be suitable for ORV use.

14) The length of the hunting season advocated in Alternative 4 allows for enough access for hunting by limiting use of ORVs to one week from the beginning of moose and caribou hunting seasons until the end of those seasons. This would make for ORV subsistence access roughly between the last week of July and the end of September of any given year. We understand, however, that when NPS opened the TUA to qualified subsistence uses, the emergency closure to ORV use was performed during hunting season only. We hear that locals have used ORVs throughout the summer months. Limiting this access to a shorter period of time through this EA, a period of time that is focused strictly on hunting moose and caribou, will still provide reasonable access, although it will be difficult to enforce, and will require that the community and NPS work together to avoid negative impacts. (Denali Citizens Council)

NPS Response: See previous response. Also, if trails are built to the standards described in the EA and they are opened to ORV use by the Superintendent only after they are determined to be ready for ORV use, the NPS believes there is not sufficient reason to impose fixed seasonal limits.

Vehicle Standards

15) We support the decrease from 1,500 pounds, as indicated in earlier proposed alternatives and commented on by us in April 2006, to the current 1,000 pound weigh limit. While we are appreciative of its inclusion as the standard in all alternatives, we want to be sure that the gross weight includes not only the vehicle, but also the rider and any cargo (gas, camping gear, meat, etc.). A 1,000 pound weight limit doesn’t do any good if there is an additional 400 or 500 pounds of rider, moose meat, and gear. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The ERRATA clarifies that the standards in the EA are robust to 1,500 pounds. Trails will be built to accommodate a 1,000 pound vehicle plus the rider, meat, and gear. This was considered in the analysis.

16) We do not support the use of track vehicles. These have been shown to be particularly damaging to trails and from what we read in the finding, they are not in much, if any, use today. The description of uses in the finding states that most families “have migrated to the exclusive use of ATV 4-wheelers.” From the description of families that used tracked vehicles, we found none using track vehicles past the late 70s. This is a damaging technology, creating greater soil erosion when negotiating sharp turns and typically requiring a wider area to turn around, and should not be permitted on these trails. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The ERRATA clarifies that references in the EA to tracked vehicles are for non skid steer vehicles only. Responsible use of non skid steer vehicles do not cause the impacts that are described by the commenter.

Closures

17) While we are supportive of no off-trail riding for retrieval and are pleased that is not included in the preferred alternative, we would nonetheless like to comment on the standards presented in the EA. Here are several suggestions:

- a. What is the basis for choosing a slope of 20% as a criterion for closure? In our comments on the range of alternatives in April 2006, we suggested that the 25% slope was too much by directing you to Slaughter C, Racine C, Walker D, Johnson L, Abele G. 1990. “Use of off-road vehicles and mitigation of effects in Alaska permafrost environments: A Review.” *Environmental Management* 14(1): 63-72. In that paper, it finds that “...extensive erosion on steeper (12-18%) slopes; the erosion was apparently still active in some trail sectors after 20 years on nonuse.” While the decrease to 20% is going in the right direction, 20% remains a concern.
- b. Other NPS research on ORV impacts on slopes indicates that both trail slope alignment and trail grade (what this plan refers to as slope) are equally important in determining trail stability/degradation (Marion, J.L. & Olive, N. 2006. “Assessing and understanding trail degradation: results from Big South Fork National River and Recreation Area.” NPS Final Research Report, USGS Blacksburg, VA, 84p). In this report, the authors note that the least eroded trails are those that are aligned with the contour, and that the influence of trail grade increases as trail slope alignment angles moves from alignment with the contour to a direct ascent (p. 23). We include Figure 3 from the report by Marion & Olive to highlight how slopes of less than 6% on near vertical slope alignments (0 – 22°) can result in significant soil erosion. There is a similar rate of erosion for slopes up to 15%, but on slopes greater than 6% the erosion impacts nearly double at near vertical slope alignments. By reducing the slope (grade) to less

than 15% and fitting the trail to the contour of the land (a high trail slope alignment angle), the potential for erosion can be greatly reduced.

- c. Closure of areas with saturated soils is an important step in reducing trail impacts on the landscape. We agree that no trails should pass through the vegetation covers listed. Under Alternative 3 1.5 acres of wetlands remain impacted, and so stabilizing trails in wetlands and the other identified vegetation covers that have saturated soils should be required before use can continue on those segments of the trails. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The selected action prohibits use of ORVs off trail so further discussion of the criteria used to determine closure areas is a moot point. The NPS agrees that it will be important to design trails to reduce potential for erosion. NPS fieldwork indicates erosion occurs frequently at slopes above 8%, so trail improvements will be designed with that consideration. The NPS agrees that work will need to be done immediately on many trails identified in the selected action in order to bring them into compliance with the standards outlined in the EA.

18) It should be made abundantly clear that when the existing trail system is degraded beyond acceptable levels and/or if vehicles go off the trail and create new impacts, that entire section of the trail will be closed to everyone. We feel the proposed plan to access existing trail and then monitor for negative changes is reasonably good, but we don't see much discussion of new damage caused by people going off the trails and what the consequences of that action would be. A very simple way to encourage self-policing by all ORV users is a simple statement in the Record of Decision that any deviation from the existing trail system will result in the trails being closed to everyone. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: If a vehicle goes off trail, the NPS will cite the driver. The NPS will manage the trails to the standards described in the EA and will use a range of tools to get a section of trail back in compliance if monitoring has determined that standards are approaching or have exceeded the red light degradation levels. NPS will use the most effective and appropriate tool to manage the resource.

Monitoring and Degradation Levels

19) In our comments on the Range of Alternatives, we made a point of stressing the importance of a monitoring program and establishing standards against which to measure levels of degradation to prevent impairment to park resources. We are happy to see a thorough discussion of the monitoring (Appendix 2 and Appendix 4) using Best Management Practices and a detailed set of degradation measures. Here are several suggestions to improve what you have proposed for Alternative 3:

- A. Periodic repeat of the ground-based GPS-mapping activities is critical towards monitoring degradation levels. Significant on the ground monitoring of trails and measurements for all of the categories listed in table 2.1 should be made as frequently as possible. Further, aerial photos can be an additional tool for detecting degradation and illegal use and should be included in the monitoring plan for any alternative.
- B. What is the goal in developing “index sites?” Monitoring ORV use can be problematic, so if these data cannot be collected reliably, how will the NPS assess ORV use in order to characterize “index sites?” We are concerned that the data collection system may be too complicated and, therefore, won’t be accurately collected or just plain won’t be analyzed and used. What information will ground cover, species composition and soil temperature provide that has not already been determined in classifying vegetation types along the trails? What will be the reference point for repeat measurements of soil tract depth be if the trail width expands and edges of the trail are also compacted?
- C. What is the goal of having paired control and high use sites? Shouldn’t the trail degradation monitoring criteria alert trail managers of further impacts? Control sites may also experience continued degradation even in the absence of ORV use due to water erosion, so wouldn’t it be better to remediate as much of the highly impacted closed trail segments as possible? This monitoring activity needs to have a clearly stated goal and outcome in order to be worthwhile and effective.
- D. Monitoring for invasive species is critical, and management prescriptions need to include immediate alert responses to the presence of any spreading weeds. While floodplains have been identified as highly susceptible vectors for the spread of invasive species, any disturbed area, such as a trail, can be colonized by non-native invasive species. Thus, invasive species should be included as a category in Table 2.1 with an Action Degradation Level of “Presence of any invasive species requires removal.”

Any monitoring program should be easy to implement and be affordable. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: A) The NPS agrees that periodic repeat of the ground-based GPS-mapping activities is critical towards monitoring degradation levels, and that measurements should be made as frequently as possible. The NPS also agrees that aerial photography is an invaluable tool for detecting degradation and illegal use. Nothing in the selected action would prevent the NPS from using aerial photography for monitoring. B) Index site refers to an area of non-impacted terrain close to and with similar characteristics as impacted areas. Since the severity, progression, and recovery of impacts from motor vehicles differ by landscape characters, these provide a reference to be used to help understand the differences in impact progression and recovery of impacted areas. Monitoring work in 2007 tested various methods and when the final report for that work is finished, specific methods will be promoted as having been reliable, effective, and practicable in the field. This will provide a set of realistic

procedures that can be used in subsequent years that will be effective within our constraints. Information on vegetation and local sites adjacent to ORV use areas provides baseline data on non-impacted conditions, which are useful when assessing the potential future path of degradation or recovery (which differs by landscape type). It also provides information on vegetation that may be impacted directly, thus providing before and after data. The center point of the trail is used as the center point, as referenced by the initial site survey, positioned by GPS, and marked with a stake. The transect width goes to a recorded distance on either side of the trail center, typically four meters, which allows two meters or so of non-impacted vegetation. In areas of wider trail degradation the distance extends further. If a trail area becomes even wider, in addition to alerting NPS management of a seriously worsening situation, biologists could extend the transect distance to incorporate the new area. C) The NPS believes the goal and anticipated outcome of monitoring is stated in the EA. The goal is to document current trail conditions and alert park management to degradation; the outcome is that the NPS will take action (in the form of maintenance, repair, closure, etc.) sufficient to maintain sustainable trails. D) The ERRATA indicates that NPS staff involved in monitoring should also look for and report evidence of invasive plant species.

20) We support the degradation levels detailed in the EA. However, the EA is vague regarding actual action that will be taken when degradation reaches the “action” level. One would assume that the action would fit the level of degradation, but the most appropriate intervention for actionable degradation would be to close that trail until damage could be repaired. All of the other interventions, especially education, monitoring and enforcement and technology requirements are important, proactive elements of general plan implementation and should not be considered response to degradation. The management plan should give more specifics regarding how often and in what way trails will be monitored during the period of ORV use (daily? once a week? Where? How extensive?) (Denali Citizens Council)

NPS Response: If a vehicle goes off trail, the NPS will cite the driver. The NPS will manage the trails to the standards described in the EA and will use a range of tools to get a section of trail back in compliance if monitoring has determined that standards are approaching or have exceeded the red light degradation levels. The NPS will use the most effective and appropriate tool to manage the resource.

Trail Management Tools and Prescriptions (Appendix 5)

21) Understanding how to mitigate impacts and deterioration often requires understanding the level of trail use. Due to the technical difficulties in monitoring trail usage, we would like the NPS to require ORV users to register in order to provide some estimate of usage. Although registration does not provide exact usage data, it will allow the NPS to estimate maximum usage of trails, track potential increases in the number of users and provide all of the benefit listed in Table 2.3 for Required Registration (p. 2-16). (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The NPS plans to gain a better understanding of the number of ORV users in the TUA. Nothing in the selected action precludes the NPS from registering users; however, the NPS would first try other methods, such as trail counters.

Moose Harvest Data

22) While the scientific data available for basic populations in Denali is among the best for Alaska parks, work that NPCA is doing to identify gaps between existing science and an optimal level of science that park biologists feel is reasonable for making sound management decisions points to more baseline moose data needed for the Cantwell area. We are encouraged that the Community Harvest Survey for Cantwell has been recently updated. Given that there was over a 20-year gap since the previous survey (done in 1982), we want to make sure future updates continue on a more regular basis. Because hunting pressure is likely to increase in the near future due to the allowance of ATVs, we recommend updates be done every 5-7 years. This baseline science is very important in setting the proper subsistence harvest limit that maintains natural and healthy wildlife populations and still provides for a sustainable moose harvest. The number of moose harvested could become the limiting factor on the number of ORVs allowed to use the trail system. We urge the Park Service to focus on the needed wildlife population and harvest data as an integral part of this ORV management plan. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: The NPS agrees that it is important to monitor moose harvests and population parameters in the TUA. The NPS has cooperated with ADF&G in coordinating moose surveys in GMU 16B, so that surveys can be conducted concurrently or close together in time, obviating concerns about moose moving between state and federal lands in the time between surveys. The same strategy will be undertaken in GMU 13E, with NPS biologists attempting to schedule moose surveys concurrently with adjacent ADF&G surveys.

Limits on ORV Use

23) In our April 2006 Range of Alternatives comments, we suggested that there would eventually be the need to limit ORV use as the population grows, whether in five years or 15, and how that limit will be implemented remains missing in this EA. Additionally, limitations may be necessary if too much ORV use degrades the area, but a limited amount could be tolerated and moose could still be harvested. A discussion of how you would go about determining and implementing these limitations needs to be included. (National Parks Conservation Association, The Wilderness Society, Trustees for Alaska, Alaska Transportation Priorities Project, Alaska Center for the Environment)

NPS Response: If the population of Cantwell increases and there is a need to restrict moose harvests, Title VIII of ANILCA will be used to establish priority. Regulating harvest numbers is outside the scope of this EA. If unacceptable resource impacts occur, the NPS will monitor the resource and take appropriate action. Table 2.3 describes types of actions that the NPS might use.

24) Ostensibly, this EA does little to guarantee that ORV use levels remain at 1980 levels, a limit that expresses the real intent of ANILCA. In fact, this topic was eliminated from detailed study in Section 2.8.6, the justification being that, “there is too much uncertainty about the correlation between the 1980 ORV use levels within the TUA and potential resource damage. Therefore, to limit the use levels to this number would be an arbitrary decision.” (EA, p. 2-22) We disagree. The decision to maintain use levels to those prior to 1980 is in line with the intent of Congress and therefore cannot be based strictly on “resource damage” criteria. Of course, use of ORVs at 1980 levels must be subject to regulation to protect park values, but introducing and allowing MORE use and justifying it because it causes no harm is not upholding the spirit of ANILCA. Granted, modern ORVs may cause less damage than the larger track vehicles traditionally employed. However, this is a good thing in its own right and does not argue that therefore more use should be allowed. The Denali Subsistence Resource Commission, which is composed of users, has argued this position (EA, p. ES-1), “Specifically, in a September 29, 1996 letter to the NPS, the Denali SRC made the following recommendation: ‘Access should be allowed at the same level as 1980, with reasonable allowances for restrictions to preserve the environment.’” (Denali Citizens Council)

NPS Response: The NPS disagrees that ANILCA calls for limiting use to 1980 levels. The SRC recommendation mentioned above was intended to restore ORV use where it had been removed rather than reduce ORV use. The NPS believes that the monitoring provisions in the plan and subsequent management actions would effectively minimize resource damage, which is a goal of this project.

Impacts Analysis

25) CNPSR is concerned by the proliferation of OHV access on federally managed conservation lands, including national parklands. The expanding use of off-road machines seriously stresses native flora and fauna, causes soil erosion, degrades water systems, scars landscapes and damages cultural resources. In addition to physical impacts, OHV traffic frequently competes with, and even excludes, legitimate human uses of park lands and resources, including traditional subsistence uses. Virtually all studies of ORV/ATV access find that such access invariably results in environmental damage. This damage is magnified by the fragile nature of the lands in Alaska. (Coalition of National Park Service Retirees)

NPS Response: The NPS agrees that ORV use can cause adverse impacts to park resources and values. The impacts of ORV use under different scenarios in the TUA are evaluated in the impacts analysis.

26) We disagree with the assertion in the EA that actions under the Preferred Alternative would “retain eligibility for wilderness designation status for the TUA.” We realize that NPS has pledged to manage lands in the ANILCA additions as if they were Wilderness until such time as the identification and designation process mandated in ANILCA is completed. However, the use of ORVs and the complex, airborne system of management needed for monitoring and mitigation removes the TUA from Wilderness eligibility, and it should be so asserted in the Final EA. Even the most conservative management plan for ORV use will involve major impacts to wilderness character through 1. manipulation of park resources in the building and marking of trails, 2. interruption of natural sounds not solely from the ORVs themselves, but really more from the

amount use of helicopters and airplanes that would be required to monitor and enforce the plan, and 3. designation of the Backcountry Management Unit definition to Corridor (reflecting a more crowded experience for all users). Subsistence uses in and of themselves do not impair Wilderness suitability, but introduction of widespread access for ORVs does. (Denali Citizens Council)

NPS Response: The NPS disagrees that the Preferred Alternative would remove the TUA from wilderness eligibility. Actions described in Alternative 3 would create moderate negative impacts to wilderness but would not result in impairment.

27) The EA speaks to some moderate impacts to “visitor experience,” but should plan more proactively for conflicts between subsistence and recreational uses, for three reasons: a. Most recreational users would not anticipate the use of firearms, and need ample warning. Possible closure to recreation during hunting season should be seriously considered, and trailhead information provided. b. Some recreational users may attempt to take ORVs into the park, especially on those trails that take off from the Parks Highway. We realize that this is not the intent of the plan or the desire of the legitimate users, but it is likely, over the years. The plan must state how it will monitor this activity, which could occur any time of the summer off state lands. c. Designation as corridor for these lands invites uses that may not be appropriate recreationally, and must be managed. (Denali Citizens Council, Alaska Quiet Rights Coalition)

NPS Response: The NPS agrees that these are important considerations. Normal operating procedures at the Backcountry Information Center will alert recreational users to hazards, such as use of firearms, in the TUA. The monitoring and enforcement program outlined in the EA will alert managers to violations such as those described in the comment. The NPS will take appropriate action to ensure resources are protected.

28) Regarding moose, the EA states on page 3-23 that in November of 2005, the most recent survey in the TUA, the “bull/cow ratios show signs of stress to the population...65 cows and 29 bulls, a 45:100 ratio, with 8 calves...NPS wildlife biologists have concluded that these numbers generally do not show an excess population that can be harvested.” The 2005 moose density was 1.2 per square mile. Caribou are present, however both contributory herds, the Denali and the Nelchina, have seen reductions over the past years, with the Denali making small gains lately. It would appear from these data that the TUA cannot handle the impact from up to 50 households hunting, and that even doubling the hunt from 5 to 10 harvested bull moose could overtax the resource. By this token, it would not take long before caps on hunting would be required. The EA touches on this subject very lightly, asserting that Alternative 3 would not result in impairment of park resources, but a situation is set up by this plan that could easily do so. How will NPS manage, in cooperation with the Federal Subsistence Board and the State of Alaska, to set appropriate limits proactively? This needs to be spelled out in greater detail. Regarding wolves, the current limit of 10 wolves set by the Federal Subsistence Board is inappropriate, and yet with a scarce ungulate resource, local hunters may elect to press the Federal Board to maintain or even raise that limit, especially if ungulate harvests are limited out and folks are disappointed. This situation places the service in an awkward position, since the management standard in the ANILCA additions is for “healthy and natural” populations. A limit of 10 wolves looks almost like de facto predator control when viewed in the context of a hunted park. DCC

had requested last fall that NPS intervene in the Kantishna subsistence hunt to reduce or eliminate the 10 wolf limit there. We were told to take this matter up with the SRC or Federal Subsistence Board. Hopefully, NPS will be more proactive in Cantwell. (Denali Citizens Council)

NPS Response: As discussed in the EA, the NPS would take the appropriate measures to work with the Federal Subsistence Board, the Denali Subsistence Resource Commission, and the Regional Advisory Councils to establish subsistence harvest limits for moose and caribou as necessary to maintain natural and healthy moose and caribou populations on park lands. The NPS would monitor wolf harvest records from the TUA. If there were any indication of a substantial increase that would affect segments of the population, the NPS would take appropriate management action, which could include proposing a harvest limit. The NPS would monitor wildlife populations to determine if or when it is necessary to take action.

29) Under the preferred alternative, if ORVs are used all summer for subsistence activities, black bears would be subject to predation, as their season is currently July 1st to June 30th. The season for wolves is lengthy as well, Aug 10 – April 30th. This means that ORVs in summer and snowmachines in winter can do subsistence hunts for wolves and bear. Such a situation argues for placing limits on ORV access for purposes of hunting. (Denali Citizens Council)

NPS Response: Subsistence hunting of black bears and wolves is a legal activity. If populations are over harvested, the proper mechanism to address this would be through bag limits and season length changes.

30) There's probably five moose a year, and me and Scott have shot 90 percent of the moose back there. There's nobody else. I beg you to go back there and show me where I've shot all my moose. If I've done so much damage back there, somebody please come back and show me where I've killed every one of those moose. I can walk up to the spots and show you and I can guarantee you, you won't find a four-wheeler track. (PI)

NPS Response: The NPS has documented evidence of damage in the TUA caused by ORV use. The NPS also believes it is possible to use ORVs without causing unacceptable impacts. The NPS respects this perspective from a regular subsistence user in the TUA and believes that this indicates that recent management (closures within the TUA, but access trails that remain open) has been successful. The final decision would continue this successful management scenario.

Winter Hunt

31) Snowmachines are permitted in ANILCA additions for traditional activities, which include subsistence, already under Section 1110. It is not really necessary for NPS to add the possibility of a winter hunt to any alternative in this EA, since that possibility already exists, depending on seasons and permits determined by the Federal Subsistence Board. The EA should definitely provide more analysis on how NPS will work with the State of Alaska and the Federal Subsistence Board to actively manage this area, not for maximum sustained yield, but for natural

and healthy populations. This active management will require surveys, on the ground habitat checks, and cooperative team meetings to set reasonable caps. (Denali Citizens Council)

NPS Response: Snowmachine use for subsistence is provided for under Title VIII of ANILCA. While snowmachine use for subsistence purposes is allowed in the TUA, a winter moose hunt is not currently authorized. The NPS will continue to provide opportunities for subsistence and will continue to cooperate with the State of Alaska to maintain natural and healthy wildlife populations.

Cost Analysis

32) The EA should present a more thorough cost analysis, including descriptions of staff activities requested, priority activities if only partial funds are available, and comparison with the cost of implementing the current limited openings. How long will there be ranger patrols, mostly air based or also ground based, how will monitoring and ranger patrols differ in the details of their work? Is there enough staff to be in the field every day during the time ORVs are permitted? Is expense of cooperative wildlife management and consultation included in Management Prescriptions? Is this sufficient? (Denali Citizens Council)

NPS Response: The NPS disagrees and believes that the cost analysis as written is adequate and thorough.

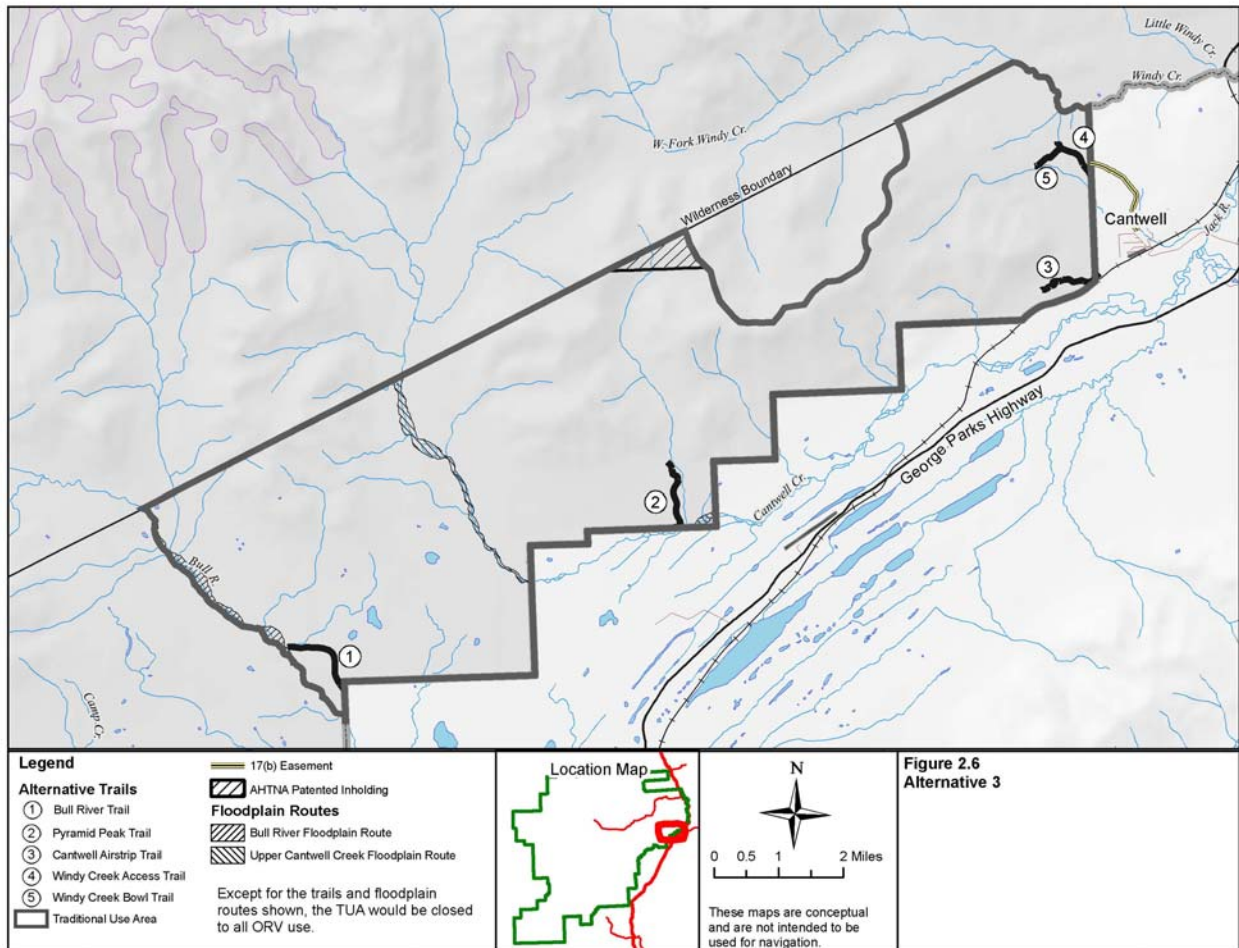
ERRATA

This errata section provides clarifications, modifications or additional information to the EA and to the selected alternative, modified Alternative 3. These amendments do not significantly change the analysis of the EA and, therefore a new or revised EA is not needed and will not be produced.

1. Changes to Alternative 3, NPS Preferred Alternative:

- Construction of a new Bull River Access Trail and designation or construction of a Bull River Floodplain Trail/Route will be contingent upon the following: NPS working with the State of Alaska and other landowners to ensure long term access to the trail across non-NPS lands; and funding for trail construction and maintenance is obtained. **[modification]**
- NPS will work with adjacent landowners, including agencies like the Bureau of Land Management, to address effective long term access to/from designated trails in the National Park. **[modification]**
- NPS will cooperate with the State to gather additional information, such as hunt preferences of Cantwell residents and biological consequences, when proposing a winter hunt. **[clarification]**
- NPS will initiate the necessary steps to promulgate a regulation that will give the Superintendent discretion to close the NPS managed trails in the TUA to ORV use until trail conditions have been determined to be suitable for ORV use. **[modification]**

- The TUA would be managed by the NPS for the use of ORVs by the residents of the Cantwell resident zone as defined in the Denali Subsistence Management Plan and those residents of GMU 13E holding a 13.44 permit. **[modification]**
2. Described under all alternatives, the impact to visitor experience that would result from past, present, and reasonably foreseeable actions shows potential for increased visitor demand in the TUA, possible displacement of users, and increased frequency of noise intrusions. This impact should be moderate instead of moderate to major because it more accurately fits the description of moderate impact located on Page 4-2. On Page 4-54, the cumulative impact to visitor experience from Alternative 3 plus the past, present, and future actions should be moderate instead of major. Alternative 3 would be responsible for a minor to moderate portion of the adverse impacts. This takes into consideration the revised impact determination for past, present, and reasonably foreseeable actions, and it also takes into account the beneficial impacts in Alternative 3 that would come from improving the trail system in the TUA. **[correction]**
 3. Section 4.5.2 General Wildlife Impacts. Moose and caribou populations in the TUA are contiguous with larger populations on adjacent state and federal lands. The protection of caribou in GMU 20C and the coordinated state and federal management of moose and caribou harvest in GMU 16B is expected to ensure that reductions in numbers would not be significant or persistent enough to affect the long-term survivability of populations in the TUA. **[clarification]**
 4. NPS managed trails described in Alternatives 2 and 3 would be built to accommodate a 1,000 pound vehicle, the rider, meat, and gear. This was considered in the analysis. **[clarification]**
 5. All references in Alternative 2 and 3 to tracked vehicles are for non skid steer vehicles only. **[clarification]**
 6. NPS staff involved in monitoring should also look for and report evidence of invasive plant species. **[clarification]**



National Park Service
U.S. Department of the Interior

Denali National Park and Preserve
Alaska



Finding of No Significant Impact

**Cantwell Subsistence Off-Road Vehicle Management
Environmental Assessment**

September 2007

Recommended: Paul F. Anderson 9/24/07
Superintendent, Denali National Park and Preserve Date

Approved: Marcia Glasgow 9/18/07
Regional Director, Alaska Date

