National Park Service U.S. Department of the Interior

Denali National Park and Preserve Alaska



Finding of No Significant Impact

Savage River Area Rest Stop

April 2006

Recommended:	Youl R. Chederson	4/21/06
Su	perintendent, Denali National Park and Preserve	Date

Approved:

Regional Director, Alaska

FINDING OF NO SIGNIFICANT IMPACT

Savage River Area Rest Stop Denali National Park and Preserve, Alaska April 2006

The National Park Service (NPS) prepared an environmental assessment (EA) to evaluate a proposal to construct a new rest stop near the Savage Campground in Denali National Park (DENA), Alaska.

The NPS has selected Alternative 2, the NPS Preferred Alternative, the *East of Campground* alternative, to construct, with mitigation measures.

Five parties provided comments during the EA public review period. The NPS response to these comments is provided in Attachment A. No changes were made to the EA, except for modifications to the area zoning map in Attachment B.

ALTERNATIVES

Three alternatives were evaluated in the EA.

Alternative 1 – the Environmentally Preferred Alternative – No Action

Under Alternative 1, the *No Action* alternative, the NPS would continue its visitor use and facility management activities without new construction of a rest stop. Visitors would continue to be able to drive private vehicles as far as the Savage River Bridge, about mile 15 on the Denali Park Road during the months when the road is clear of snow. Visitors would use the several existing small roadside pullouts to observe wildlife and scenery.

Alternative 2 – the Selected Alternative – the NPS Preferred Alternative – East of Campground

Under Alternative 2, the selected alternative, the NPS will construct a new rest stop east of the Savage River Campground, near mile 12.3 of the Park Road. It will be built as a destination for the independent traveler and include 18 automobile parking spaces and 12 oversize parking spaces (8 for RVs and 4 for buses). Both mountain and wildlife viewing opportunities exist at this location.

The site is located outside the Wilderness Zone, in the Level 2 Development Zone and the Backcountry Day Use Zone identified in the 1997 Development Concept Plan/EIS. The subzone acreages will remain the same, but the shape of the zones will shift. The area to the west of the campground will be reclassified as Backcountry Day Use Zone, and the project area will be reclassified as Level 2 Development Zone.

This alternative will include a 300 ft long, two-way paved access road connecting to a one-way loop road leading to the paved parking area. Rest room facilities will consist of annually pumped vault toilets. Gravel or paved paths will lead to covered vista points and interpretive wayside exhibits.

The development will cover about 2.1 acres and the area of potential impact will be about 2.4 acres and includes 15% for areas disturbed by clearing, equipment maneuvering, drainage, culverts, road shoulders and design refinement details.

In addition to this development east of the Savage Campground, four new double vault toilets will be built across the road near the Savage Cabin pullout. The six existing chemical toilets will be removed and replaced with these new vault toilets, which will be located behind (to the NW of) the existing toilets, and accessed via a new 10-foot wide path that connects to the existing pullout and trail. The area of potential impact for the vault toilets development at the Savage Cabin pullout will be about 0.1 acres. Therefore the total area of potential impact will be about 2.5 acres.

Geotechnical investigations will be conducted to test soil conditions. A Nodwell-mounted drill rig will be used to take approximately 16 borings in the area proposed for the rest stop, parking lot, access road and Savage Cabin pullout vault toilets.

The restroom facilities will not include flush toilets, but will utilize a vault toilet design seen elsewhere in the park. The vault toilets will be suitable for winter use. The use of annually-pumped vault toilets rather than water-based toilets will save water, lower the development footprint (no need for a water line from the campground), and lower the costs of construction, operation and maintenance. No site electricity will be provided, although supplemental lighting may be provided from photovoltaic (PV) panels on the structures.

The new rest stop will include a designated stop for Savage Shuttle.

The new rest stop will serve as the trail head for a short interpretive loop trail and for the Savage Alpine Trail. These trails have not yet been designed but the concepts are represented in the 1997 Development Concept Plan/EIS.

Alternative 3 – DCP Alternative – Northwest of Campground

Under Alternative 3, the NPS would construct a new destination rest stop northeast of the Savage River Campground. This is the location nearest to the direction for the Savage Rest Stop given on the page 31 map of the 1997 Entrance Area and Road Corridor (Frontcountry) Development Concept Plan (DCP). The scope of the facilities would be similar to those in Alternative 2 and would include the rest room replacement along the Savage Cabin Trail. The rest stop would be close to the Park Road with little separation or vegetative buffer from the road.

PUBLIC INVOLVEMENT

During project scoping, a public scoping meeting was held at the park on June 23, 2005. Approximately 10 members of the public were in attendance. The scoping meeting was advertised through web postings, emails and a press release.

The EA was released for public review and comment from February 22, 2006 through March 26, 2006. The EA was sent by mail to 40 government agencies, tribal entities, interest groups and individuals. A press release about the availability of the EA and the public review period was issued by the park on February 23, 2006. A notice about the availability of the EA and the public review period was emailed to 8 email addresses on February 24, 2006. The EA was posted on the NPS Planning, Environment and Public Comment (PEPC) website, http://parkplanning.nps.gov/. The EA was posted on the park's website, http://www.nps.gov/dena/.

Comments were received from the State of Alaska ANILCA Implementation Program, National Parks Conservation Association (NPCA), the Denali Citizens Council (DCC), a park area lodge, and an individual. The State supported the project and encouraged the NPS to follow with the connected trail projects mentioned in the EA as future actions. The NPCA supported the preferred alternative and reiterated support of the existing road limits beyond the Savage Bridge. The DCC posed several questions for clarification of NPS management intent and made some requests for management actions. The lodge company generally supported the proposal but expressed concern about mixing bus tours with independent travelers. The individual recommended visual simulation analysis and added detail in describing the visual resource impacts. NPS responses to the comments are provided in the attached errata sheet. The public comments did not change the overall conclusions in the EA analysis concerning the environmental effects of the proposed action.

DECISION

The NPS decision is to implement Alternative 2 – the NPS Preferred Alternative, the *East of Campground* Alternative, along with the mitigating measures. No modifications of Alternative 2 were made. The Development Zone for area was modified and reduced in size, as described in Attachment B.

Mitigating Measures

Mitigation measures are specific actions that, when implemented, reduce impacts, protect park resources or protect visitors. The following mitigation measures will be implemented. They are considered part of the selected alternative and they were assumed in the analysis of impacts.

Vegetation and Soils – Mitigations:

Backslopes and fill slopes will be covered with coarse materials to discourage colonization by invasive plants. Off-road construction equipment will be pressure-washed prior to entering the

park. Park staff will identify and list invasive species of concern. Imported gravel and fill dirt will come from materials sites that are free from these target invasive species, or the materials will be heated (run through a dryer). Park staff will verify that the material sites were free of target invasive species prior to their use. Disturbed soil areas will be revegetated as necessary, with native vegetation, following the Interior Alaska Revegetation Plan (Densmore, USGS 1994). Park staff will monitor the project site in subsequent years for the presence of invasive plants and, if discovered, will expand the park's existing exotic plant eradication program to include the project location.

Vista clearing may be necessary in future years to maintain mountain views from the new viewpoints. This will be done as the forest continues to grow up around the new rest stop. The need for such vista clearing should be evaluated at least every five years and carried out as appropriate. It is preferable to remove the trees when they are small and shrub-sized rather than wait for them to block the view, because 1) vistas would be maintained and 2) removal of small trees has less impact to the environment (less biomass, bird nesting opportunity and habitat).

The geotechnical investigation will be conducted while the ground is frozen and with adequate snow cover in order to minimize impacts to the soils. A small, tracked, Nodwell-type mounted drill rig will be used because it exerts low ground pressure and can turn sharply around obstacles. Use of this type of vehicle will allow for fewer trees to be removed. The cross-country access route for the drill rig will be flagged to minimize the crushing of vegetation and the removal of trees. For Alternative 2, access for the drill rig to the rest stop site will probably be from the south of the project area, via the campground road and the former roads of the old Savage Camp. This route will take advantage of the more open areas to the south of the project site and minimize tree clearing, especially along the Denali Park road edge. The access route will be over the proposed development footprint, so that any necessary tree removal for the geotechnical investigation will later be in the area cleared of vegetation for the project (assuming the site footprint did not shift as a result of the geotechnical information). A drill site at the road shoulder will be accessed from the Denali Park Road. Drill sites for the SSTs at the Savage Cabin pullout will be accessed directly from the pullout and existing trail.

Wetlands – Mitigations:

Best Management Practices (BMP) technologies will be used. Silt fences will be placed below the construction site to control and filter runoff to protect any adjacent wetlands. Impacts of the geotechnical investigations, including drilling and overland vehicle access, will stay on the planned disturbance area as much as possible and will be conducted while the ground is frozen and snow covered. Mitigation by rehabilitating wetlands in another area of the park will be accomplished. As much as possible, disturbance of wetlands in and around the project area will be avoided. Any areas disturbed by construction activities will be restored to as near natural conditions as possible. Prior to the start of construction activities, the NPS will salvage as much topsoil, organic matter, and vegetation as necessary for later use in site revegetation. Salvaged material will be stockpiled separately and will be returned to the disturbed areas following construction. Approximately 0.5 acres of disturbed lands (mostly not wetlands) will be revegetated with native plants after the completion of the construction activities. The DENA's Resource Preservation and Research Division will perform all revegetation activities.

Wildlife and Habitat – Mitigations:

During project construction, the guidelines in the park's Bear-Human Conflict Management Plan will be followed. Food will be stored in vehicles or other hard-sided structures. Household waste and food garbage will be removed daily from the park. Bear-proof containers will be used for food and refuse. Project activities will respect wildlife closures that may occur in the vicinity of the project area.

Bird habitat (vegetation) will not be removed during the early nesting season, April 1 through April 30, unless the site was pre-approved by a park wildlife biologist. There will be no bird habitat removal May 1 through July 15. After removing vegetation for the project, there will be no seasonal restriction for construction activities, even during the following nesting seasons. If an active nest were encountered at any time, it will be protected from destruction. Eggs, chicks, or adults of wild birds will not be destroyed.

Wilderness – Mitigations:

The proposed facilities will be designed to fit with the natural surroundings. Design elements will consider screening or buffers for sound and wilderness access (trails).

Cultural Resources – Mitigations:

Project excavations will be monitored by cultural resource staff. If previously unknown cultural resources are located during construction, the project will be stopped in the discovery area until cultural resource staff could determine the significance of the finding and appropriate courses of action.

Visitor Use and Recreation – Mitigations:

Construction activities will be conducted in a manner to minimize impact on visitor use and recreation. Barricades will be placed around the construction site to prevent visitor entry. The proposed facilities will be designed to fit in with the natural surroundings. The hours and time of year for construction activities will be adjusted to avoid disruption of the campground experience.

Visual Resources – Mitigations:

The rest area will be designed to fit with the natural surroundings and sited to reduce its visibility from off-site. The design will take advantage of topography and existing vegetation to provide natural screening. Construction materials will be selected to complement the natural environment in color and texture.

Local Communities/Socioeconomic Resources – Mitigations:

No mitigation measures were developed for local communities and socioeconomic resources because the project impacts to these resources included small-scale stimuli to the local economy, consistent with historic limits and trends.

Rationale for the Decision

Alternative 2, the NPS Preferred Alternative, *East of Savage Campground*, with mitigating measures, was selected because it will satisfy the purpose and need of the project better than the other alternatives – enhancing visitors' experiences by providing opportunities to experience nature and gain a greater understanding of park values, and providing for increased visitor use and enjoyment in the park's road corridor (frontcountry).

The *No Action* Alternative was the environmentally preferred alternative but did not include the construction of a new rest stop in the Savage River area.

Alternative 3, *Northwest of Campground*, would have greater impact to wetlands (about 2.1 acres compared to 0.2 acres); views of Mount McKinley would not be as good; traffic and pedestrian circulation, congestion and safety would decrease; and esthetics of the site, and of the connected action of a future short interpretive loop trail from the rest stop, would be less desirable (overgrown and brushy compared to open tundra).

The selected alternative will implement activities called for in the 1997 Frontcountry DCP: construct a new rest area near the Savage River Campground, available to the general public. Impacts are acceptable and will be at negligible to minor levels. Implementation will not cause impairment of park resources or values.

Significance Criteria

The selected 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 EA evaluated the effects of the preferred alternative (construction of a new Savage River Rest Stop east of the campground) on vegetation and soils, wetlands, wildlife and habitat, wilderness, cultural resources, visitor use and recreation, visual resources, and local communities/socioeconomic resources. There will be minor effects on vegetation and soils, minor effects on wetlands, minor effects on wildlife and habitat, minor effects on wilderness, negligible effects on cultural resources, minor effects on visitor use and recreation, minor effects on visual resources, and minor effects on local communities/socioeconomic resources.
- (2) The degree to which the proposed action affects public health or safety. The proposed action will not adversely affect public health or safety.

- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. The geographic area of the selected alternative is east of the Savage River Campground within Denali National Park. Cultural resources in the project vicinity will be protected by specific permit conditions for these park resources. Non-jurisdictional wetlands will be impacted by the project (0.2 acres). However, this impact is unavoidable, minor. The project area is ecologically important for moose caving and other wildlife habitat. However the Development Zone acreage from the 1997 DCP will not increase as a result of the new rest stop.
- (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 during the 30-day 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. The degree or possibility that the effects on the human environment will be highly uncertain or will involve unique or unknown risks is remote.
- (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. The degree or possibility that the action may establish a precedent of future actions with significant effects or represents a decision in principle about future considerations is remote.
- (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 will involve the construction and operation of new visitor facilities, and will provide for increased visitor use of the Savage River area, without having a significant temporary or long-term adverse affect on the environment or on visitor recreation. The action is not related to other actions of individual insignificance 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 Savage River area contains two known historic sites related to early twentieth century park development the Savage River Cabin and the Old Savage Camp. Neither will be directly impacted by the project facilities. The Savage River Cabin was determined ineligible for listing on the National Register of Historic Places. The Old Savage Camp, dating to 1922, may be eligible. With the specific mitigation measures for cultural resources protection, the degree or possibility that the action may cause loss or destruction of known scientific, cultural, or historic resources is remote.

(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. There are no threatened or endangered species, proposed threatened or endangered species, critical habitat, or proposed critical habitat in the project area.

(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

No Impairment

The levels of adverse impacts to park resources anticipated from the selected alterative 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, and therefore will not violate the NPS Organic Act.

Compliance with Other Laws and Orders

The selected alternative complies with the Endangered Species Act, the National Historic Preservation Act, the Clean Water Act, the Clean Air Act, the Healthy Forests Restoration Act, the Alaska National Interest Lands Conservation Act (ANILCA), the Wilderness Act, the Fish and Wildlife Coordination Act, the Federal Noxious Weed Control Act, Executive Order (EO) 11988 for Floodplain Management, EO 11990 for Protection of Wetlands, EO 12898 for Environmental Justice, EO 130007 for Protection of Sacred Sites, EO 13112 on Non-Native Invasive Species, and other Federal, State, local and tribal laws and requirements for the protection of the environment. There will be no restriction of subsistence activities as documented by ANILCA, Title VIII, Section 810(a) Summary Evaluation and Findings.

No Significant Impact

The NPS has determined that the selected alternative will not cause significant impact and 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 for the Savage River Area Rest Stop Environmental Assessment

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

NPS RESPONSE TO PUBLIC COMMENTS

A public comment period was provided for the EA from February 22, 2006 through March 26, 2006. Comments were received from the State of Alaska ANILCA Implementation Program, National Parks Conservation Association (NPCA), the Denali Citizens Council (DCC), a park area lodge, and an individual. The paraphrased comments and the NPS responses follow.

Substantive comments are those that modify the existing alternatives, propose new alternatives not previously considered, supplement, improve or modify the impact analysis, or make factual corrections. These comments did not change the EA conclusions about the effects of the selected action or alternatives.

Comment No. 1: We encourage the NPS to follow this action with the connected actions of an Alpine Trail connection and a short interpretive loop trail.

NPS Response: The NPS intends to develop a trails EA addressing these projects, and to implement the trail connections concurrently with the construction of the new Savage Rest Stop.

Comment No. 2: The road limits beyond the Savage River should be strictly adhered to in order to protect park resources and maintain a quality of wildlife viewing experience for visitors.

NPS Response: The EA did not address or change the road use limits beyond Savage River. These remain in place.

Comment No. 3: What is the overall vision for the first 15 miles of the Denali Park Road?

NPS Response: The 1986 General Management Plan (GMP) and the 1997 Frontcountry DCP describe the management direction for the first 15 miles of the Denali Park Road. The NPS will provide opportunities for private car and bus passengers to travel the road, view wildlife, stop and hike, take pictures, and enjoy the backcountry. The NPS will provide an increased variety of hiking opportunities for the independent and bus traveler in this area through construction of a trail system.

Comment No. 4: The EA falls short in addressing the threat of negative impact to park resources from increased visitation.

NPS Response: The 1986 GMP and the 1997 DCP addressed increased visitation and laid out the strategy to protect park resources while providing for visitor use. The subject EA is an implementation plan tiering off of these earlier plans, to develop one aspect of the visitor facilities along the first 15 miles of the Denali Park Road. As a facility implementation plan, re-analysis of visitor use pressures was not part of the scope of the EA.

Comment No. 5: The EA should demonstrate the application of VERP (Visitor Experience and Resource Protection – a measurement tool to help assess the level of impact the resources can sustain [carrying capacity] while also providing a good visitor experience) to show that activities along this section of the Denali Park Road are not dangerously trending toward damage to park resources.

NPS Response: The direction laid out in the 1997 Frontcountry DCP is in effect. A detailed VERP analysis was beyond the scope of this EA.

Comment No. 6: Is the new Savage Rest Stop going to become a stop on another "short tour" targeted to package tour passengers?

NPS Response: The new rest stop is being designed to accommodate both private travelers and bus passengers. Any additional short tour packages that may use the new facility would depend on requests from concession operators and the details of concession contracts.

Comment No. 7: Is NPS considering the eventual end of private car use on this section of the Denali Park Road?

NPS Response: No; the NPS is not considering a private vehicle closure or limit on the first 15 miles of the Denali Park Road.

Comment No. 8: The EA does not present a disparate range of alternatives. The *Dispersed Alternative* was dropped after the public scoping meeting, yet it represents the greatest difference in choice to a destination style rest stop.

NPS Response: The range of reasonable alternatives presented in the EA followed many internal scoping meetings and discussions, before and after the optional public scoping meeting on June 23, 2005. The decision was made to eliminate certain alternatives from full analysis in the EA. This is discussed in section 2.7 of the EA – Alternatives Considered but Eliminated from Detailed Study. One of the significant reasons the Dispersed Alternative was eliminated is that it would not provide a single destination-type rest area where visitors would be likely to spend the day in the area. This is an

important aspect to the new rest area – to provide visitors with a facility that would encourage longer and more intimate visits with the park backcountry.

Comment No. 9: If 100 + people are getting out and experiencing the park in this tight area, there will be impairment from social trail formation without close monitoring and well marked, well planned trails.

NPS Response: Social trail formation near the new rest stop could be a problem, however we do not agree that it could rise to the level of impairment of park resources or values. The NPS plans to carefully design, construct, monitor and manage the rest stop area and the associated trails with this issue in mind in order to minimize social trails.

Comment No. 10: Vista clearing to enhance views by cutting vegetation may be acceptable along the Park Road where the road itself encourages brush growth, but is a highly questionable activity in a National Park.

NPS Response: The new rest stop is being designed to take advantage of the natural landscape and vegetation to both screen the parking area and facilities in the trees and to take advantage of the adjacent open terrain for views of Mount McKinley and the nearby areas. Vista clearing to maintain views of Mount McKinley from the rest stop's view points might not be necessary, or over a long period of time, the forest may grow up to obscure that important view. Since mountain viewing, especially of Mount McKinley, is one of the purposes of the project, some very limited and careful vegetation removal might be necessary in the long-term. For this reason, it was included in the EA as an anticipated possible future connected action. If vista clearing is carried out, it will be very limited and carefully done.

Comment No. 11: The FONSI should mandate that a Road Shoulder Working Group be established to address planning of the proposed 8-foot shoulder project of the Denali Park Road. The Group would advise management and influence future planning in order to limit the project.

NPS Response: The 8-foot shoulder proposal was mentioned in the EA, under cumulative effects, because it is called for by the 1997 Frontcountry DCP (page 22). If funding and planning ever move forward on the road shoulder proposal, then project scoping under NEPA will be carried out, and will include public involvement.

Comment No. 12: Reconsider the annual costs of the new facilities, given the real possibility of physical impairments with 3 major concentrations of visitors within a mile – the campground, the historic cabin, and the new rest stop. The new rest stop should be staffed with full-time employee for trash pickup and cleanliness; ranger staff must be available throughout the day for monitoring trails, wildlife interactions and soundscapes; and wetter sections of trails require close resource monitoring.

NPS Response: The EA estimated \$29,000 per year for additional life cycle costs, mostly for custodial service. Other staff needs, such as patrol, monitoring and mitigation activities, will come out of the existing operating base of the park.

Comment No. 13: The FONSI should state the expected sources of operating funds for the new facilities (visitor fees, private groups, nonprofits, including Doyon/Aramark and the Alaska Railroad) for a 15-year operating window. The FONSI should specify from whom NPS is intending to solicit funds.

NPS Response: The annual cost of operating the new facilities will be born by the park. If another funding source is sought at a later date, it will not influence the project's environmental impact, so it is not a topic of this NEPA analysis.

Comment No. 14: The site should be designed with utmost sensitivity if it is necessary to make the site dual purpose, serving both independent travelers and bus tours. It is unfair to both visitor use groups to inject masses of bus tour visitors into the same peaceful picnic site/rest stop with visitors that are traveling independently.

NPS Response: The rest stop is planned primarily for the independent traveler arriving by shuttle bus, private automobile or recreational vehicles, but it could also serve bus tours. Four bus parking spaces are planned. Facility designers will use utmost sensitivity in accommodating both groups at the site.

Comment No. 15: The analysis of visual resources is very weak. Design details describing the facility contract with the landscape, and visual simulation graphics are recommended.

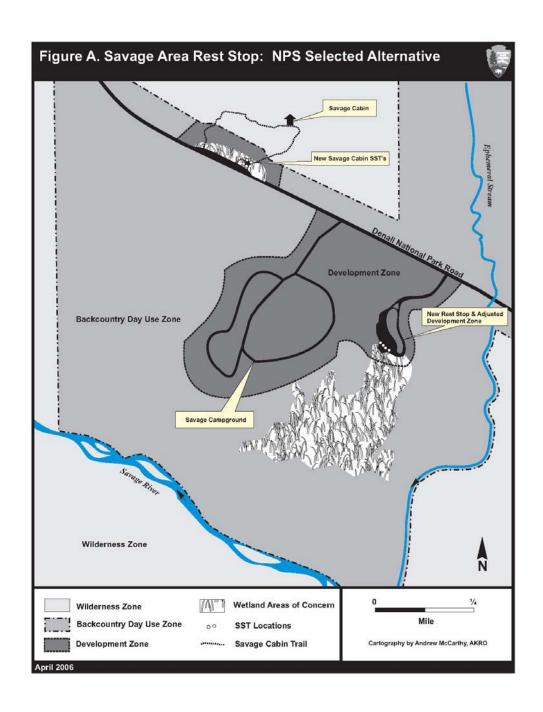
NPS Response: The potential for visual intrusion of the new rest stop was a significant topic of discussion and concern throughout scoping. Many design decisions were made based on the desire to reduce visual intrusion, including locating the parking area among the screening of the trees, and reduced width of the access road. Full design of the structures is not near completion since construction is scheduled for 2008. Facility designers will use utmost sensitivity in preventing visual intrusion whenever possible. The design and scoping team did not feel it was necessary, given what was already known about the site characteristics and the efforts to protect them, to produce visual simulation graphics for the EA...

ATTACHMENT B

ERRATA
Changes to the Area Zoning
for the
Savage River Area Rest Stop
Environmental Assessment

Figure 2-2, page 12: This errata modifies the zone map for the selected alternative. The new map is Figure A, below.

The intent of this change is to minimize the Development Zone and limit it to the existing and planned development area, thereby maximizing the Backcountry Day Use Zone. This is to provide for better wildlife and habitat protection, for moose and other animals and plants, and to demonstrate the restraint that the NPS intends to impose on its developed areas in order to maximize the protection of the park resources.



ATTACHMENT C

STATEMENT OF FINDINGS
For Executive Order 11990 (Protection of Wetlands)
for the
Construction of a New Savage River Area Rest Stop
Denali National Park and Preserve, Alaska

April 2006

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Superinte	endent, Denāli Natio	nal Park and Preserve	Date
		Servicewide Consistency:	
_	el Wagner	(ACTING FOR BILL JACKSON) on, Washington Office	6/9/08
CHALW	ater Resources Divisi	on, Washington Office	Date
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	Maria Bra		4/14/06
Regional	Marcia Gla Director, Alaska Reg		776706 Date

Recommended:

PURPOSE AND NEED FOR ACTION

The National Park Service (NPS) has prepared and made available for public review an environmental assessment (EA) to evaluate the impacts of construction of new visitor facilities in the Savage Campground area in Denali National Park and Preserve.

The approved 1997 Entrance Area and Road Corridor Development Concept Plan for Denali National Park and Preserve identified the need for the expansion of visitor facilities in the Savage Campground area. The existing facilities do not provide enough parking, toilet and trailhead facilities between mile 9.5 and the Savage River Bridge at mile 14.7 to meet the needs to visitors who travel the road or want to get out of their vehicles and enjoy the mountain and wildlife viewing opportunities.

The NPS is proposing to construct a new rest stop near mile 12.3 of the Denali Park Road. A new 300 foot spur road will connect to a 30 vehicle parking lot, toilets, covered deck, and trailhead. In addition, the NPS will replace the six existing temporary chemical toilets at the Savage Cabin pullout with four double vault sweet smelling toilets (SSTs) (see Figure A below).

Executive Order 11990 (Protection of Wetlands) requires the NPS, and other federal agencies, to evaluate the likely impacts of actions in wetlands. The executive order requires that short and long-term adverse impacts associated with occupancy, modification or destruction of wetlands be avoided whenever possible. Indirect support of development and new construction in such areas should also be avoided wherever there is a practicable alternative.

To comply with these orders, the NPS has developed a set of agency policies and procedures which can be found in Director's Order 77-1: Wetland Protection, and Procedural Manual 77-1: Wetland Protection. The policies and procedures related to wetlands emphasize: exploring all practical alternatives to building on, or otherwise affecting, wetlands; reducing impacts to wetlands whenever possible; and providing direct compensation for any unavoidable wetland impact by restoring degraded or destroyed wetlands on other NPS properties.

The purpose of this Statement of Findings (SOF) is to present the NPS rationale for its proposed plan to construct portions of the Savage Rest Stop project in the wetland area. This SOF also documents the anticipated effects on these resources.

WETLANDS WITHIN THE PROJECT AREA

Wetland boundaries were identified in the field by NPS personnel and the boundaries were transferred to 2004 air photos and transferred to a GIS layer by NPS staff to determine wetland acreage. The U.S. Army Corps of Engineers visited the project site in July 2003 and agreed with the wetlands delineation within the project area. Of the 2.5 acres affected by the proposed action, 0.2 acres were classified as wetlands (Figure A) under the "Classification of Wetlands and Deepwater Habitats of the United States," the Cowardin Classification System (Cowardin et al. 1979), and are therefore subject to NPS wetlands compliance procedures. Of the total 2.5

acres of disturbed land, 2.3 acres are upland, as evidenced by the white spruce associations, the lack of hydrologic indicators and the presence of well-draining soils.

The wetlands located within the proposed project area consist of wet scrub-shrub and forested wetlands. The core area of wetlands is classified as Palustrine Scrub-Shrub Broad-Leaved Deciduous Saturated Wetlands (PSS1B). The areas surrounding these core wetlands are classified as Palustrine Forested Needle-Leaved Evergreen Saturated Wetlands (PF04B). These wetlands provide habitat for small mammals, such as red squirrels, snowshoe hares and porcupine; bird species, including gray jays, robins, thrushes, sparrows and warblers. Moose frequent the area for forage, and it is considered potential moose calving area.

The major plant species on the wetland sites include willow spp., including *Salix brachycarpa*, subspecies *niphoclada*, dwarf birch and white spruce. Common ground cover includes mosses, lichens, crowberry and a variety of forbs. No threatened or endangered animal or plant species are found in the area and no research or reference sites have been developed in the project area.

No water supply points or wells are located between the project site and the Savage River approximately 2,000 feet away. No floods are known from the site, as forests cover most of the adjacent land and gravelly layers which absorb the rainfall are below the surface soils. The wetlands function to attenuate some snow melt surface flow during break-up, when the ground is still frozen.

The wetland type described above is common throughout the eastern areas of Denali National Park and Preserve. The park has determined that the wetlands located at the project site are locally common and have limited environmental significance for the area, in terms of surface water quality, including sediment control and water purification, animal habitat and cultural resources.

THE PROPOSAL IN RELATION TO WETLANDS

The proposal and alternatives are described in detail in the project EA.

The construction of a new Savage Rest Stop and related facilities will impact a maximum of 0.2 acres of wetlands. The extent of disturbance is shown on the attached Figure A.

Approximately 0.1 acre of wetlands will be disturbed for the construction of the new SSTs to replace the chemical toilets at the Savage Cabin pullout. The location in wetlands was chosen because of the need to have the toilets adjacent to the tour bus parking area, though behind a narrow screen of roadside trees. The wilderness boundary also limits how far toward the cabin the toilets could be placed.

Approximately 0.1 acre of wetlands will be disturbed for the construction of the new rest stop. This rest stop site was chosen to balance a number of factors, including maximum distance from the Savage Campground, an open view toward Mount McKinley, good screening from the park road, and not disturbing the site of the Old Savage Camp. The requirement for a view of Mount

McKinley necessitated putting the pedestrian part of the rest stop at the edge of the open wetlands. The site of the parking area and access road was adjusted northward during project scoping and early design so that none of the vehicular areas will disturb wetlands. The SSTs and covered deck at the south edge of the parking area will be in wetlands.

The wetland soils are very thin in much of the project area and sit on old gravelly alluvial fans. Most of the construction in and near the wetlands can be accomplished by placing clean fill on top of the existing soils to the depth necessary to trail and view point facilities.

Discharge of dredged or fill material into jurisdictional wetlands is regulated by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. According to a recent determination by Corps personnel, the project would not affect wetlands under the jurisdiction of the Corps (Don Rice, pers. comm.).

MITIGATION PROPOSED

Federal and NPS Policy is to avoid siting projects in wetlands whenever possible. If circumstances make it impracticable to avoid wetlands, then mitigation of unavoidable impacts must be planned. The NPS policy of "no-net-loss of wetlands" requires that wetland losses be compensated for by restoration of wetlands, preferably of comparable wetland type and function and in the same watershed (if possible).

Of the 2.5 acres affected by the proposed action, 0.2 acres are classified as wetlands. This SOF commits to full 1:1 compensation for the 0.2 acres of disturbed wetlands.

On-Site Rehabilitation

As much as possible, disturbance of wetlands in and around the project area will be avoided. Adjacent areas disturbed by construction activities will be restored to as near natural conditions as possible. Prior to the start of construction activities, the NPS will salvage as much topsoil, organic matter and vegetation as necessary for later use in site revegetation. Salvaged material will be stockpiled separately and will be returned to the disturbed adjacent areas following construction.

Approximately 0.5 acres of disturbed adjacent lands will be revegetated with native plants after the completion of the construction activities. The Denali National Park and Preserve's Resource Preservation and Research Division will perform all revegetation activities.

Off-Site Compensation (Wetland Restoration)

Compensation, by restoration of previously disturbed degraded wetlands, is required under the NPS "no-net-loss of wetlands" policy for projects involving disturbance or loss of wetlands. Compensation will occur for the loss of 0.2 acres of palustrine wetland. One-for-one compensation will be completed elsewhere in the park by restoring a riverine and palustrine wetland in the Kantishna Hills region of the park (see Figure B below). It is anticipated that the wetland

functions and values lost at the rest stop project site will be balanced by those wetland functions and values regained at a restored former placer mine site.

A Federal Highways Administration-funded project to remove gravel from former placer mined areas in Kantishna is scheduled for 2007-2008. Two-tenths of an acre within the park's Eldorado Creek floodplain has been selected for restoration within the scope of this mitigation. These wetlands are classified as Riverine Upper Perennial Unconsolidated Shore with Intermittent Flooding Wetland (R3USJ), and Palustrine Unconsolidated Shore Cobble Gravel Seasonally Flooded Well-Drained Wetland (PUS1D). Restoration plans include: removing and disposing of debris; stabilizing the channel and floodplain; stabilizing the access road; and revegetating the stripped areas. Preliminary work includes water and soil sampling, and engineering surveys of the existing stream channel, floodplains and upland topography. Discharge measurements will be collected to aid in stream channel design. Soil sampling will assess the geo-chemistry of the upper watershed and determine the soil's potential for revegetation efforts. Surveys, both cross-sectional and topographical, will be conducted to supplement site data on the NPS topographic maps. This information will be used to locate and estimate material amounts for use in recontouring the site and reconstructing the stream channel and floodplain.

Cost estimates for this project are approximately \$17,000 per acre, based on an unpublished report, "Cost Estimation for Reclamation, National Park Service, Alaska Regional Office, January 1994." This report reviewed three separate mining reclamation projects that were conducted on abandoned claims in Denali National Park and Preserve.

Stream channel and floodplain restoration will be based on the techniques of the Glen Creek restoration project at Denali. Project design requirements will include a channel capacity for a 1.5-year (bankfull) discharge and a floodplain capacity for up to a 100-year discharge. The project design will include the use of bio-revetment, located on meanders, to encourage channel stabilization using natural methods. Brush bars, located in areas of little or no fines, will be employed to dissipate floodwater energy and encourage sediment deposition. Riparian areas will be revegetated with willow cuttings and other appropriate vegetation. Depending on the results from the soils nutrient analysis, fertilizer might be used to ensure a quick start for new vegetation.

Monitoring of the stream channel and riparian areas will occur to determine the success of the reclamation efforts. Vegetation plots and permanently mounted cross-sections will be surveyed and measured again after the first year. Additional seeding and revegetation will occur on areas not vegetated during the first year. It is anticipated that the site will be a functional wetland within 3-5 years, and will be fully-functioning within 15 years.

ALTERNATIVES CONSIDERED

Alternative 1, *No Action*, describes the existing conditions in the Savage Campground area. No additional Rest Stop would be constructed west of mile 9.5.

Alternative 2, the Selected Alternative, describes the NPS Preferred Alternative to construct a new 30-vehicle rest stop and related facilities *East of the Campground*, adversely impacting 0.2 acres of wetlands.

Alternative 3 describes a similar construction project but located close to the site identified conceptually in the Frontcountry DCP, *Northwest of the Campground*, adversely impacting 2.1 acres of wetland.

Several alternatives were discussed during the project scoping process but were eliminated from further evaluations. These are briefly explained in the EA.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES ASSOCIATED WITH THE PROPOSED ACTION

The potential environmental consequences of the proposed action and the alternatives are fully described in the EA.

CONCLUSION

The NPS concludes that there are no practicable alternatives to disturbing 0.2 acres of wetlands and to building facilities within wetlands for the construction and operation of the proposed Savage Area Rest Stop in Denali National Park. Wetlands would be avoided to the maximum practicable extent. The wetland impacts that could not be avoided would be minimized. The NPS acknowledges that some natural localized wetlands processes would be lost by implementation of the Savage Rest Stop project. Impacts on the 0.2 acres of wetlands would be compensated for, on a minimum 1-for-1 acreage basis, by restoring riverine and palustrine wetland habitat and associated riparian habitat, in the Kantishna Hills region of the park (formerly placer-mined stream and riparian habitat). The NPS finds that this project is consistent with the Procedural Manual #77-1, Wetland Protection, 2003 and with NPS Director's Order #77-1, Wetland Protection. The NPS finds that this project is in compliance with Executive Order 11990, Wetland Management.

