

**UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE, INTERMOUNTAIN REGION**

**RECORD OF DECISION**

**MOOSE-WILSON CORRIDOR COMPREHENSIVE MANAGEMENT PLAN**

**Grand Teton National Park  
Wyoming**

**INTRODUCTION**

The Department of the Interior, National Park Service (NPS), has prepared this Record of Decision (ROD) for the *Moose-Wilson Corridor Final Comprehensive Management Plan / Environmental Impact Statement* (Final Plan/EIS), August 2016.

The Moose-Wilson corridor encompasses about 10,300 acres in the southwest corner of Grand Teton National Park. The corridor is bounded roughly by the Teton Range to the west, the Snake River to the east, Teton Park Road to the north, and the park's south boundary. The Moose-Wilson Road extends for 7.1 miles through the corridor and serves as the primary access route to several key destinations in the area. The narrow, winding road provides access to the south end of Grand Teton National Park and a rustic, slow-driving experience for visitors looking for exceptional scenery and wildlife viewing opportunities. During the summer, the road also serves as the most convenient access point and connection between destinations within Grand Teton National Park and those outside the park, particularly along Wyoming Highway 390 and elsewhere on the west side of the Snake River.

The overarching purpose of the plan is to establish a long-term vision and provide comprehensive management strategies for the Moose-Wilson corridor to ensure the protection of significant national park resources and values. The need for the plan is to take a comprehensive look at significant issues facing the corridor and the effects of those issues on park resources and visitor experiences.

This Record of Decision identifies the decision/selected action, including mitigation measures; describes other alternatives analyzed; identifies the environmentally preferable alternative; and includes rationale for the decision reached. In accordance with NPS policy, a nonimpairment determination for the selected action is attached to this Record of Decision (attachment A). Complete references for in-text citations in the Record of Decision and nonimpairment determination are in the Final Plan/EIS.

## DECISION (SELECTED ACTION)

After consideration of the concerns and issues raised during the planning and environmental impact analysis process and all public comments received, and in light of applicable laws, regulations, and NPS guidance, the National Park Service has selected alternative C for implementation. Alternative C was identified as the NPS-preferred alternative in the Final Plan/EIS.

The selected action will become effective upon approval of the Record of Decision by the NPS Intermountain Regional Director.

## SUMMARY OF THE SELECTED ACTION

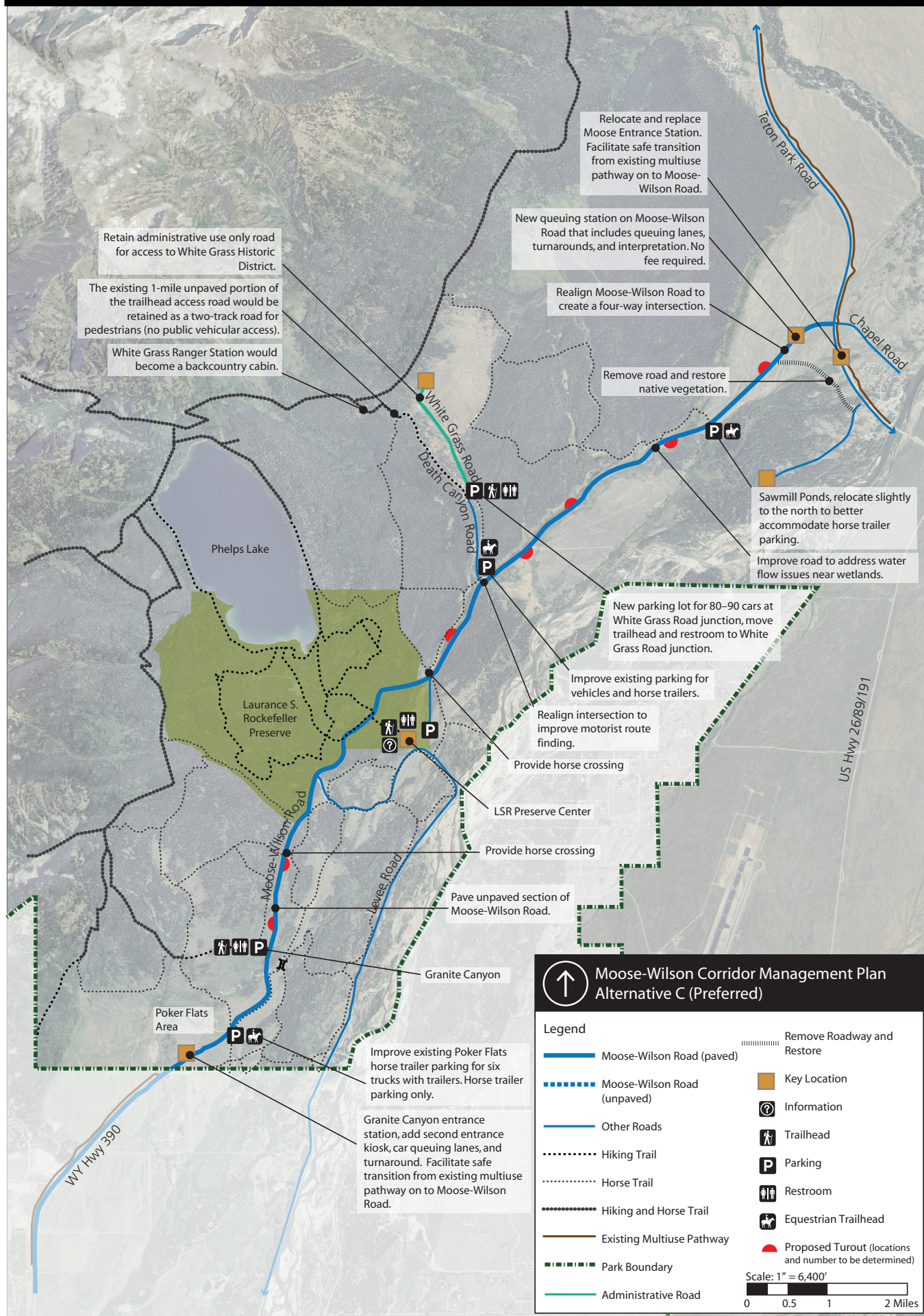
The emphasis of the selected action is to balance preservation and public use and enjoyment by exemplifying conservation legacies within the corridor. The intensity and timing of visitor use will be managed to effectively provide high-quality visitor opportunities. Development within the corridor will generally be maintained within the existing development footprint. A sense of discovery will predominate in this outstanding and diverse natural ecosystem and cultural history area. The following provides a list of key strategies of the selected action, and Map 1 shows the locations where many of the key strategies will be applied. More details on the key strategies can be found on pages 51–58 of the Final Plan/EIS, and detailed site planning maps can be found on pages 68, 72, 75, and 79.

### Key Strategies

- The northernmost 0.6 miles of the Moose-Wilson Road will be realigned to address wildlife habitat connectivity and operational issues. The segment between Sawmill Ponds Overlook and the Death Canyon Road junction will be retained in its existing alignment. The portion of the road adjacent to wetlands will be reconstructed to correct drainage issues and improve road conditions. Other portions of the road will be reconstructed and repaved when needed. Wildlife safety mitigation measures will be included in the design of the road reconstruction.
- The existing 1.1-mile segment of the Moose-Wilson Road that is currently unpaved will be reconstructed and paved, but the approximate alignment of the road will be retained. This segment of the road has gradually become wider over the years as a result of drivers maneuvering around potholes, and the width of the road will be narrowed for consistency with the existing paved portions of the road.
- A visitor capacity will be set for the Moose-Wilson corridor, including Death Canyon Trailhead, the Laurance S. Rockefeller Preserve, Granite Canyon Trailhead, and the Moose-Wilson Road. The total visitor capacity for the Moose-Wilson corridor will be set at 550 people at one time, the equivalent of 200 vehicles at one time. (For more details, see attachment B.)
- Increases in traffic and volume-related congestion on Moose-Wilson Road will be addressed by using timed sequencing techniques to limit the number of vehicles entering the corridor at any one time during peak use periods. Queuing lanes at the north and south ends of the corridor will be provided as needed. If additional traffic management measures are needed in the future, a corridor reservation system and/or transit system may be considered.

- A visitor use management framework will be implemented to manage visitor use within the corridor. For details on the indicators, thresholds, and potential management actions that could be implemented if the thresholds are exceeded, see pages 86–96 of the Final Plan/EIS. Indicators and thresholds will be implemented covering:
  - a vehicle-free viewscape;
  - peak levels of use on trails;
  - people at one time at key destinations;
  - amount of user-created overflow parking;
  - condition of historic and archeological sites;
  - illegal activity at historic and archeological sites;
  - amount of user-created roadside disturbances;
  - number of user-created trails;
  - percent time nonnatural sounds are audible; and
  - number and types of undesirable human-wildlife encounters.
- The speed limit on the Moose-Wilson Road will be reduced from 25 miles per hour to 20 miles per hour. This reduction in speed is intended to improve safety by reducing the speed differential between bicyclists and motorists. Reducing the posted speed limit may also encourage use of the road primarily for enjoyment rather than convenience, thereby reducing demand. In addition, a safe transition from the existing multi-use pathways onto Moose-Wilson Road will be facilitated at the south and north ends of the corridor.
- The Death Canyon Trailhead will be relocated to the current end of pavement on the existing access road (i.e., near the junction with White Grass Road). Parking will be provided in a paved or unpaved area for approximately 80–90 vehicles (similar to current parking demand). The existing 1.0-mile unpaved portion of the trailhead access road (no longer necessary for vehicular traffic) will be retained as a two-track for pedestrians and for occasional park administrative use.
- Long-term monitoring will be implemented in the corridor, including visitor use levels and patterns and the indicators related to visitor use. The results of this monitoring will allow park managers to periodically check on the status of the fundamental resources and values to ensure those resources and values are not being degraded. (For more details on monitoring guidelines, see pages 121–127 of the Final Plan/EIS.)
- Adaptive management strategies will be implemented to sustain desired resource conditions and visitor experiences in the corridor. Please refer to the indicators and thresholds found on pages 82–96 of the Final Plan/EIS and Attachment B of this Record of Decision for more information about this adaptive approach.
- A number of management strategies will be pursued to address aspects of climate change including science, mitigation, adaptation, and communication. (For more details on strategies to address climate change, see pages 128–129 of the Final Plan/EIS.)







## Sequencing of Construction Projects

The rehabilitation and realignment of Moose-Wilson Road will be completed in phases over the course of four or more construction seasons, each of which lasts approximately from May through November. Phasing will also apply to all other non-road construction activity described in this plan that is connected to the particular road segment under construction.

Construction staging will be confined to previously impacted areas. These areas may include larger parking areas within the corridor and other parking areas outside the corridor but within the park boundary. Another possibility is to use the sites of structures in the corridor slated for demolition. Before the sites are restored to natural conditions, they may be used for staging purposes.

During the period of construction, portions of the corridor may be temporarily closed to allow for the safe operation of heavy construction equipment in the narrow corridor. Residents of inholdings within the corridor who use that segment for access would have scheduled access to the road. Contractors will be required to provide access for emergency vehicles. There may be construction delays due to wildlife activity; the emphasis will be on careful monitoring of construction activities to avoid impacts on wildlife and minimize these delays as much as possible.

A key park management goal is to keep the LSR Preserve Center and all other recreation sites in the corridor accessible during all phases of construction; however, access to the center and other sites may need to be closed or have visitor access restricted during specific phases of construction. The scheduling of construction activities will be communicated in future public meetings so that area residents and other stakeholders are aware of any construction-related closures in the corridor before they occur.

## MITIGATION MEASURES INCORPORATED INTO THE SELECTED ACTION

A number of mitigation measures will be implemented as part of the selected action to protect park resources and reduce the risk of injury to employees and park visitors during implementation of the selected action. These measures, described in the *Moose-Wilson Corridor Final Comprehensive Management Plan / Environmental Impact Statement* (see pages 109–121), cover general construction; sustainability; scenery; geologic processes; air quality; hydrology and water quality; wetlands; wildlife and wildlife habitat; fisheries; federal listed wildlife species; soils; vegetation; ecological communities and wildlife; aquatic resources; cultural history and resources; archeological resources; historic structures, sites, and cultural landscapes; ethnographic resources; museum collections; visual resources; natural soundscapes and acoustic resources; quality of the visitor experience; access and opportunities; and health and safety. Among the mitigation measures are the following:

- Construction activities within the Moose-Wilson corridor will be limited to 30 minutes after sunrise to 30 minutes prior to sunset; no night work will occur.
- To the extent possible, construction work will be scheduled during the summer months when grizzly bears are less likely to be present along Moose-Wilson Road.
- When possible, construction activities will be scheduled to avoid the section of road between Sawmill Ponds Overlook and Death Canyon Road from September 1 to October 15, when bears historically are most active.
- Roadside vegetation and movement corridors will be managed in a manner that facilitates safe crossing of the corridor by grizzly bears, Canada lynx, and gray wolves. Where trees and other woody vegetation must be cleared along the road edge, designs will create an irregular forest edge and preserve as many large trees on the edge of the disturbed area as possible to provide sufficient cover for grizzly bears, Canada lynx, and gray wolves crossing the road.
- If park managers deem it appropriate, roadsides may be brushed of ground vegetation, including fruit-bearing shrubs, to remove forage species for bears and thus minimize human-grizzly bear interactions and reduce the potential for vehicle collisions with bears. If this action is taken, any loss of grizzly bear forage resulting from brushing will be restored or planted in the corridor to ensure there is no net loss of forage habitat. Brushing and thinning will occur outside of the migratory bird nesting and brood rearing time periods.
- As necessary, Moose-Wilson Road will temporarily be closed to public access, including pedestrians, bicycles, and vehicles, when bears are foraging along the road.
- The facilities, programs, and services of the National Park Service and its partners will be accessible to and usable by all people, including those who are disabled. This policy is based on the commitment to provide access to the widest cross-section of the public and to ensure compliance with the Architectural Barriers Act (42 USC 4151 et seq.) and the Rehabilitation Act (29 USC 701 et seq.).

In addition to these mitigation measures, a number of best management practices and monitoring guidelines are incorporated into the selected action (see pages 103–109 and 121–127 in the Final Plan/EIS).

## **ALTERNATIVES CONSIDERED BUT NOT SELECTED**

### **ALTERNATIVE A (NO-ACTION ALTERNATIVE)**

This alternative represents the continuation of current management practices related to natural and cultural resources; visitor use; traffic and transportation; park operations; and maintenance of roads, trails, and facilities within the Moose-Wilson corridor. (For more details see pages 39–44 in the Final Plan/EIS.)

### **ALTERNATIVE B**

This alternative emphasizes the corridor as a visitor destination. Reduced crowding on Moose-Wilson Road and at destinations within the corridor would provide visitors an opportunity for self-discovery. Existing developed areas and facilities would be maintained where appropriate and removed or relocated in some areas to protect natural and cultural resources. (For more details see pages 45–50 in the Final Plan/EIS.)

### **ALTERNATIVE D**

The emphasis of this alternative is to better integrate the Moose-Wilson corridor with the broader park experience and link it to the region's larger recreational network. Park management would focus on ways to connect people with resources and promote understanding, enjoyment, preservation, and health. To enhance the recreational scenic driving experience, strategies would be used to reduce traffic congestion. Visitors would be provided opportunities to get out of their vehicles and experience the outstanding natural and cultural landscapes. Additional development and concentrated visitor use in the corridor would be in focused areas. (For more details see pages 59–64 in the Final Plan/EIS.)

## RATIONALE FOR THE DECISION REACHED

In reaching the decision to select alternative C for implementation, the National Park Service evaluated each alternative based on how well it met the NPS statutory mission and responsibility, met the purpose and need for taking action, preserved the area's fundamental resources and values, affected park resources and visitor experiences, and other factors (e.g., cost, feasibility, tribal consultations, stakeholder interest).

The National Park Service selected alternative C for several reasons. This alternative exemplifies the conservation legacy stories of the Muries, Rockefellers, and tribes within the corridor. Overall, alternative C best protects the corridor's natural and cultural resources by limiting new development and disturbances in the corridor, reducing the existing development footprint in some areas, providing some restoration of natural hydrological processes, and carefully managing traffic levels. New development that does occur, such as the realignment of the northernmost section of the road, will ultimately reduce resource impacts of the corridor. Although several ongoing visitor-caused resource impacts, such as parking in undesignated areas, creation of pedestrian and equestrian social trails, wildlife disturbance, and the potential for wildlife-vehicle collisions, will be reduced in the corridor, a wide range of visitor activities will continue to be provided. The intensity and timing of visitor use will be managed to improve visitors' experiences—experiences for both first-time visitors to the corridor and traditional user groups will be enhanced. Visitors such as drivers and bicyclists will have opportunities for a safer experience as a result of a lower speed limit and reduced traffic volume. The continuity of road character and driving experience will be improved and is consistent with the road's period of historic significance. Alternative C will ensure the continued protection of corridor resources by providing park managers with both a framework and the flexibility to monitor and manage visitors as conditions change in the future. It will reduce maintenance costs by eliminating the need for routine grading and dust abatement and will eliminate more than \$12 million in deferred maintenance.

The key strategies in alternative C were selected for the following reasons:

- **Traffic Management.** Implementing a time-sequencing traffic management system, providing traffic alerts before the entrances, and reducing the speed limit to 20 mph will improve visitor safety and experience while in the corridor. These actions are easy for visitors to understand and straightforward to implement. In addition, they constitute a disincentive for commuter traffic during peak visitation periods, while improving the scenic driving experience for park visitors.
- **Physical Characteristics of the Road.** Paving the unpaved portion of the Moose-Wilson Road and incorporating a "safety edge" will eliminate the need for routine grading and dust abatement, improve the continuity of road character and the driving experience, and allow errant vehicles (motorized and nonmotorized) to safely return to the road. These actions are also consistent with the road's period of historic significance.
- **Road Realignments / Reconstruction.** Realigning the northernmost 0.6 mile of the Moose-Wilson Road will move this segment out of a high-use wildlife corridor, as well as improve visitor experience for northbound travelers who currently have to pass through both the Granite Canyon entrance station and the Moose entrance station on their way to the northern portion of Teton Park Road. In addition, it will allow visitors who pass through the entrance station at Moose to receive information from park staff prior to traveling south on



Moose-Wilson Road. The segment of the road adjacent to wetlands between the Sawmill Ponds Overlook and the Death Canyon Road will not be realigned, thus avoiding significant adverse impacts to a major archeological site—a primary reason alternative C was selected over alternatives B and D, which would realign the road and adversely affect this archeological site. In addition, under alternative C this segment will be reconstructed and minor brushing of roadside may occur to improve driver-wildlife visibility. Brushing would be light, directly adjacent to the road, and not involve major vegetation alteration. It would only occur where it would benefit wildlife, not promote higher vehicle speeds, and not impact the historic character of the road. This area will be actively managed during high wildlife use periods, which will reduce undesirable visitor/wildlife interactions.

- **Parking and Roadside Turnouts.** Installing officially designated, strategically located turnouts along the Moose-Wilson Road and applying design solutions to reduce off-road parking will improve opportunities for visitors to experience the corridor, improve traffic flow during wildlife jams, and reduce roadside vegetation impacts.
- **Bicycle Use.** Paving the unpaved portion of the Moose-Wilson Road, installing road markings where necessary and signage and bike racks at destinations, reducing the vehicle speed limit and managing traffic volumes, transitioning the existing multi-use pathways onto Moose-Wilson Road at the south and north ends of the corridor, and providing education about the bicycling experience will enhance bicyclists' safety and road experience and maintain the existing road footprint to avoid significant impacts. This strategy was selected over the development of a multi-use pathway (alternative D) because pathway development would result in adverse impacts on park resources, including significant net increases in wildlife habitat disturbance and fragmentation, changes to the character and visual quality of the corridor, and adverse impacts on a major archeological site and possibly other unidentified archeological sites.
- **Commercial Activity.** Prohibiting taxis and other non-park-dependent commercial traffic in the corridor, while allowing commercial road-based guides and tours to continue, will reduce commuter-related traffic volume on Moose-Wilson Road. Authorizing shuttle services in the future, if needed, will provide flexibility for future management of the corridor.
- **Death Canyon.** Relocating the existing trailhead and vault toilet to the current end of the paved road (i.e., the junction with White Grass Road) and establishing a formal parking area will eliminate extensive off-road parking in this area and provide an improved trailhead experience and wayfinding for park visitors. In addition, retaining the existing 1.0-mile unpaved portion of the trailhead access road for pedestrians will enhance the wilderness character/backcountry experience, as well as eliminate deferred maintenance of the unpaved road.
- **Winter Access and Use.** Terminating winter maintenance and plowing of the Moose-Wilson Road at a parking area north of the Death Canyon Road junction (from the north corridor access) and at the Granite Canyon trailhead (from the south corridor access) will provide a range of opportunities for visitors (cross-country skiers, snowshoers, hikers, runners) to access and use the corridor in the winter.

- **Visitor Use and Experience / Education and Interpretation.** Providing pre-visit information and electronic media to prepare visitors for self-discovery, themes, and resource information prior to entering the corridor will enhance the experience of both first-time visitors and traditional user groups and help reduce resource impacts.
- **Horse Use.** Clearly defining the horse use facilities, including trails and parking areas, removing/rerouting horse trails that cannot be sustained, designating horse routes throughout the corridor, and delineating horse crossings over the Moose-Wilson Road will improve the safety and experience of horseback riders, decrease conflicts with other visitors, and reduce resource impacts due to horse use.

Alternative A (no action) fails to meet the purpose and need for the plan and does not address the major issues facing park managers. Taking no action would result in continued increases in traffic volumes and associated visitor use levels that adversely affect wildlife, ecological communities, historic character, visitor experience, and other fundamental resources and values of the corridor.

Alternative B was not selected primarily because the proposed realignment of a segment of the Moose-Wilson Road would result in significant and irreversible adverse impacts on important archeological resources. In addition, relocation of Moose-Wilson Road segments and restoring existing segments to natural conditions would result in a substantial loss of the historic character and cultural integrity of the road corridor. The alternative also would have a significant adverse impact on visitor use and experience, particularly the potential gate closure on Moose-Wilson Road at the LSR Preserve to prevent through traffic during peak use periods. Finally, alternative B would not be as effective as alternative C in managing visitor capacity of the corridor.

Alternative D was not selected because it would have the same significant adverse impacts on archeological resources, historic character, and cultural landscape integrity as alternative B. In addition, the development of the multi-use pathway would result in significant adverse impacts on grizzly bears and other wildlife, increasing habitat fragmentation and wildlife disturbance in the corridor as well as posing wildlife-related safety concerns for visitors. Adverse vegetation impacts due to the multi-use pathway and road realignments would substantially diminish the quality and integrity of the area's ecological communities. Other significant adverse impacts would occur on the historic character and scenic quality of the Moose-Wilson corridor. Finally, implementation of alternative D would cost substantially more than all of the other alternatives.

In March 2007, the National Park Service concluded the preparation of a transportation plan / environmental impact statement and record of decision for Grand Teton National Park that included several actions regarding the Moose-Wilson corridor. These included realignment of two segments of the Moose-Wilson Road (similar to the actions presented in alternatives B and D of the Moose-Wilson Corridor Final Plan/EIS); testing of a number of different strategies for managing traffic along the Moose-Wilson Road (including pedestrian and bicycle use); and construction of a multi-use pathway between the Granite Canyon Entrance Station and the Laurance S. Rockefeller (LSR) Preserve, which was being planned and developed during the time that the transportation plan was underway. The multi-use pathway was scheduled as the last phase of development for a 41-mile parkwide pathway system. The phasing plan was included in order to allow each successive segment of pathway development parkwide to be based on the results of monitoring and analysis of environmental impacts, visitor use patterns, and other factors relevant to construction and use of the system. This Record of Decision for the Moose-Wilson Corridor Final Plan/EIS supersedes and replaces the actions identified for the Moose-Wilson corridor in the 2007 transportation plan record of decision.

As noted on page 5 of the Moose-Wilson Corridor Final Plan/EIS, the National Park Service has gathered and analyzed new information about park resources within the Moose-Wilson corridor as part of this planning effort. Based on this new information, the NPS has re-evaluated decisions made in the 2007 transportation plan record of decision. For example, with respect to a multi-use pathway, the National Park Service considered, among other things, the changes in visitor use patterns, including increases in bicycle use as a result of pathway development elsewhere in the park, the information and recommendations contained in the report, *Human-Bear Interaction Risk Assessment for the July 2014 Moose-Wilson Corridor Management Plan Alternatives* (MacHutchon, 2014), and new information concerning the location, extent, and significance of archeological sites within the corridor. Furthermore, the changed circumstances within the corridor, new information, and updated analyses were considered within the context of the purpose and need for the Moose-Wilson Corridor Comprehensive Management Plan rather than for the earlier transportation plan, which had a narrower focus. In addition, the National Park Service considered how changes in visitation and visitor use patterns associated with a multi-use pathway would contribute to or conflict with other goals of the planning effort and the structure of the preferred alternative/selected action. Taken separately and in combination, the changed circumstances, new information, and goals of the planning effort resulted in the National Park Service making a different decision with respect to a multi-use pathway than was made in 2007.

Similarly, the National Park Service reevaluated realignment of the part of Moose-Wilson Road between Sawmill Ponds Overlook and the Death Canyon Road junction. Although the 2007 record of decision for the transportation plan included realignment of that segment, new information about the extent and significance of archeological site 48TE498, consideration of the effects of each alternative on natural and cultural resources and visitor use and enjoyment, and the purpose and need for the plan caused the National Park Service to weigh whether a new decision regarding realignment was warranted. Although the National Park Service received comments that, under section 106 of the National Historic Preservation Act, archeological data recovery (i.e., collecting and storing artifacts found at the site) could mitigate adverse effects associated with constructing a new road and/or pathway through the site, the National Park Service determined that, consistent with its responsibilities under the National Park Service Organic Act and the park's enabling legislation, the plan's purpose and need would most appropriately be met by avoiding the site altogether—an approach that is widely supported by American Indian Tribes associated with the park.

With respect to the testing of different strategies for managing vehicle traffic on the Moose-Wilson Road, as well as bicycle and pedestrian use, the National Park Service used the planning effort and its opportunities for public engagement to listen to a variety of viewpoints from the local community and public at large and to evaluate the environmental impacts of several methods for managing traffic. This record of decision selects one of those options, with an adaptive management component to allow flexibility in its implementation. The decision, and the process by which it was arrived at, is fully consistent with the intent of the 2007 transportation plan and record of decision.

## ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is the alternative developed and analyzed during the National Environmental Policy Act process “that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources” (43 CFR 46.30). Based on the analysis of environmental consequences of each alternative presented in chapter 4 and summarized in table 9 of the Final Plan/EIS, alternative C is the environmentally preferable alternative because it best protects the biological, cultural, and physical resources of the corridor.

When looked at collectively across all resources, alternative C best protects the corridor’s natural and cultural resources by limiting new development and disturbances in the corridor, generally maintaining the existing development footprint, providing some restoration of natural hydrological processes, and carefully managing traffic levels. Alternative C also addresses resource impacts due to off-road vehicle parking and parking outside designated parking areas. Although alternative C does not include the realignment of Moose-Wilson Road from Sawmill Ponds to the Death Canyon Road junction, which, under alternatives B and D would improve conditions for wildlife (including grizzly bears), hydrology, and wetlands, alternative C will avoid significant adverse impacts on major archeological resources in the Moose-Wilson corridor. Alternative D would provide for more recreational amenities yet place less emphasis on natural and cultural resource protection than alternatives B and C as a result of constructing a separate multi-use pathway.

Alternative C will result in some resource impacts in a few localized areas, such as the loss of vegetation due to construction of the new northern road alignment and the new Death Canyon parking area and reconstruction of the road between Sawmill Ponds and the Death Canyon Road junction. However, the alternative will substantially reduce adverse impacts on natural and cultural resources in several ways. The sequenced traffic management system will limit the potential increase in traffic and visitor use volumes that would likely otherwise occur, thus reducing potential impacts on soils, vegetation, wetlands, and wildlife, including grizzly bears and other listed species. As a result of the actions in alternative C there will not be a substantial increase in air pollutants emitted by vehicles driving the Moose-Wilson Road, nor will the park’s carbon footprint be substantially altered. Reducing traffic volume and congestion will also preserve the rustic and rural character of the historic road and its cultural landscape. The reduction in traffic speeds will reduce the potential for wildlife-vehicle collisions. Paving the unpaved portion of Moose-Wilson Road will eliminate impacts from dust and magnesium chloride applications on roadside vegetation. Realigning the northernmost segment of Moose-Wilson Road will reduce habitat fragmentation and create a more intact wildlife corridor near Moose. Reconstruction of parts of the road alignment south of the Sawmill Ponds to Death Canyon Road will improve drainage and the hydrology of this area and improve conditions of the large wetland complex adjacent to the road. Installing officially designated roadside turnouts and design solutions to reduce off-road parking will reduce roadside soil, vegetation, and cultural resource impacts. Relocating the Death Canyon Trailhead parking area will eliminate damage to adjacent vegetation due to extensive off-road parking, though it will result in vegetation removal to construct the new parking lot. Relocating this parking area and converting one mile of the existing Death Canyon Road to a two-track road also will result in the restoration of some native vegetation and reduce overall habitat fragmentation in the corridor, which will benefit wildlife.

## **SUMMARY OF PUBLIC, TRIBAL, AND AGENCY CONSULTATION**

Public and agency involvement in the Moose-Wilson corridor planning process, including consultations with the US Fish and Wildlife Service, Wyoming State Historic Preservation Office, and tribes are described on pages 637–643 of the Final Plan/EIS. The US Fish and Wildlife Service submitted a final biological opinion and incidental take statement on June 6, 2016. The biological opinion states that the effects of the action as proposed are not likely to jeopardize the continued existence of the grizzly bear, Canada lynx, and the gray wolf. In a letter dated September 1, 2016, the Wyoming State Historic Preservation Office provided documentation of concurrence with a finding of no historic properties affected.

A consistent theme in the public comments was appreciation for the thoroughness of the plan and efforts to keep the public apprised throughout the planning process. Overall, many commenters expressed their support for the preferred alternative as a plan that balances resource protection with public access and recreational opportunities.



## CONCLUSION

The selected action as described herein best meets the purpose and need for the Moose-Wilson Corridor Comprehensive Management Plan and best addresses the planning issues and opportunities, ensuring long-term protection and preservation of the park's natural and cultural resources while also enhancing the opportunities for visitors to enjoy the corridor.

As described in the "Mitigation Measures Incorporated into the Selected Action" section above, all practical means to avoid or minimize environmental harm from the selected action have been adopted.

The selected alternative will not result in the impairment of park resources and values (see attachment A).

The required "no-action period" before approval of this Record of Decision began on September 9, 2016, with publication by the US Environmental Protection Agency of a notice of availability of the Final Plan/EIS in the *Federal Register* (81 FR 62500). The no-action period ended on October 11, 2016.

The official responsible for approving this Record of Decision is the regional director, Intermountain Region, National Park Service.

The official responsible for implementing the selected alternative is the superintendent of Grand Teton National Park, Wyoming.

### RECOMMENDED:



David Vela, Superintendent

11-28-16

Date

### APPROVED:



Sue E. Masica, Regional Director

12/5/16

Date

Attachment A: Nonimpairment Determination

Attachment B: Visitor Capacity Determination

Attachment C: Consultation Letters from the US Fish and Wildlife Service and the Wyoming State Historic Preservation Office

## ATTACHMENT A: NONIMPAIRMENT DETERMINATION

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the US Department of Interior and the National Park Service “to conserve the scenery, natural and historic objects, and wild life in the [National Park] System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (54 USC 100101(a)). Congress reaffirmed this mandate in 1978 by stating that the National Park Service must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which the System units have been established, except as directly and specifically provided by Congress” (54 USC 100101(b)(2)).

NPS *Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The National Park Service has discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park; however, the National Park Service cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS *Management Policies 2006*, §1.4.3). An action constitutes an impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values” (NPS *Management Policies 2006*, § 1.4.5). To determine impairment, the National Park Service must evaluate “the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts” (NPS *Management Policies 2006*, §1.4.5).

This nonimpairment determination has been prepared for the selected action described in this Record of Decision. The following resource impact topics were considered in this nonimpairment determination: wildlife and wildlife habitat; federally listed species; wetlands; hydrology; water quality; vegetation; soils; visual resources; acoustic resources and soundscapes; archeological resources; historic structures, sites, and cultural landscapes; and ethnographic resources. A nonimpairment determination was not made for visitor use and experience, traffic and transportation, socioeconomic environment, and park operations because these impact topics are not generally considered to be park resources or values according to the Organic Act and are not subject to the nonimpairment standard of the act. Thus, these topics cannot be impaired in the same way that an action can impair park resources and values. Similarly, because wilderness is subject to its own requirements under the Wilderness Act, it is not subject to the impairment standard of the Organic Act and is not included here.

## WILDLIFE AND WILDLIFE HABITAT

Most of the wildlife and wildlife habitat in the Moose-Wilson corridor will not be affected by the selected action. The most notable adverse effect will involve the continued use of the existing road alignment, which fragments the wetland and shrub habitat between Sawmill Ponds Overlook and Death Canyon Road from montane forest habitat to the west. The selected action also could result in increases in vehicle and visitor use disturbances to crepuscular wildlife behavior in the mornings and evenings. If visitors respond to the traffic control system by adjusting corridor travel and visit times, this could result in an overall increase in average daily traffic while still maintaining the restriction on the number of vehicles in the corridor at one time. Wildlife behavioral disturbances could increase if visitors stop at the new designated road turnouts if they see wildlife (as opposed to driving through slowly). Construction activity also will result in temporary disturbances to wildlife behavior. But, as noted above, most of the adverse effects on wildlife due to the selected action will be limited primarily to the Moose-Wilson Road and Death Canyon Road corridors. None of these adverse impacts will substantially alter the park's wildlife populations and habitat conditions. In addition, the selected action will have some beneficial impacts by reducing wildlife disturbance through improved traffic and visitor use volume management, the northern realignment of the Moose-Wilson Road, and the relocation of the Death Canyon Trailhead. Because the adverse impacts of the selected action will not be wide scale or severe, and because of the likely beneficial effects, the selected action will not result in impairment of wildlife and wildlife habitat.

## FEDERALLY LISTED SPECIES

The National Park Service determined the need to carefully review the possibility that the federally threatened grizzly bear, Canada lynx, and gray wolf might be affected by the selected action. The selected action will result in the loss of a small amount of grizzly bear habitat (about 1.1 acres of berry producing shrubs along Moose-Wilson Road between the Sawmill Ponds Overlook and the Death Canyon Road) and affect the behavior of bears, possibly including temporary localized displacement along the existing Moose-Wilson Road between Sawmill Pond Overlook and Death Canyon Road. The behavior of individual lynx and wolves also may be temporarily affected by noise from construction and the presence of people and vehicles. There will be a slight decrease (~1.1 acres) in suitable lynx forage habitat. There will also be a small risk that a bear, lynx, or wolf may be killed or injured due to a collision with a vehicle on the road. The selected action will not measurably affect the distribution, abundance, or reproduction of the three species in the park. The selected action will not affect known key foraging, breeding, or denning areas for lynx and wolves. Moreover, the selected action will have several beneficial effects by decreasing potential undesirable human-bear interactions and disturbance of bears through realignment of the northernmost segment of the road, limiting the increase in numbers of vehicles traveling the road during peak use periods, reducing vehicle speeds, and periodic thinning of roadside vegetation. In its June 6, 2016, biological opinion, the US Fish and Wildlife Service concluded that the effects of the preferred alternative are not likely to jeopardize the continued existence of the three species. It further stated that “. . . the proposed action will not appreciably diminish the reproduction, numbers, or distribution of grizzly bears, Canada lynx, or gray wolves. We conclude that the proposed action will not affect the survival of grizzly bears, Canada lynx, and gray wolves nor will it impede recovery.” In addition, this plan may affect, but would not be likely to adversely affect, the yellow-billed cuckoo or its habitat because the project area is outside the elevational distribution of suitable breeding habitat for the species, the birds are unlikely to be present in the area, and the alternatives being considered for the Moose-Wilson corridor would not be expected to impact the yellow-billed cuckoo or remove or disturb its habitat. The National Park Service will continue to consult with the US Fish and Wildlife Service during implementation of the selected action to ensure impacts on these species are avoided or

minimized. Thus, the selected action will not result in the impairment of the three federally listed species in the park.

## **WETLANDS**

Most wetlands in the Moose-Wilson corridor will not be affected by the selected action. Adverse effects of the selected action involve the continuation of routing high levels of vehicle traffic and associated visitor use immediately along a large, sensitive wetland complex, which will continue to result in vegetation trampling, degraded wetland plant communities, disturbed wetland habitat, and potential threats of nonnative plants (similar to the no-action alternative). Other adverse effects from the selected action will result from ground disturbances associated with various construction projects, as well as the continuation of current winter use impacts (e.g., snow storage in the plowed sections of Moose-Wilson Road would continue to be a source for sediment loading into adjacent wetlands). In addition, the drainage improvements between Death Canyon Road and Sawmill Ponds Overlook could increase some short- and long-term sedimentation to downstream wetlands if hillside excavation is needed to accommodate the improvements; however, most of these adverse impacts would be relatively localized to this segment of the Moose-Wilson Road. In addition, the selected action will improve hydrological connectivity between upstream drainages and the large wetland complex due to reconstruction of the Moose-Wilson Road in the same area. In summary, the selected action will result in both beneficial and adverse impacts on wetlands, but the adverse impacts will be neither widespread or severe, and the beneficial effects are expected to result in an appreciable improvement to wetland conditions. For these reasons, the selected action will not result in impairment of the park's wetlands.

## **HYDROLOGY**

The selected action will have very little effect on the park's hydrology, and any adverse impacts would be localized within the corridor. Adverse impacts will occur primarily due to increased impervious surfaces caused by paving road surfaces and alterations to natural flow patterns in previously undisturbed areas where parking areas and roads are developed in the area immediately surrounding the northern realignment of the Moose-Wilson Road, the Death Canyon parking area, and adjacent areas. Short-term adverse impacts to hydrology at these sites will also occur from construction activities. On the other hand, the selected action will have several long-term beneficial effects, most notably the restoration of some hydrological connectivity and wetland hydrology due to the reconstruction and improvements to drainage conditions of the Moose-Wilson Road between Sawmill Ponds Overlook and Death Canyon Road. For these reasons, the selected action will not result in impairment of the park's hydrology.

## **WATER QUALITY**

The selected action will result in some adverse impacts on water quality due to continued vehicle-related pollution (i.e., petroleum-based) migration within the corridor, vehicle pollutants introduced into previously undisturbed areas due to the northern road realignment and new Death Canyon parking area, and sediment loading from newly disturbed areas and construction activities associated with these new developments in the corridor. These impacts would be localized in one part of the corridor, and water quality in most of the corridor will not be affected by the selected action. In addition, considering both beneficial and adverse impacts, the selected action overall will result in an appreciable improvement to water quality due to several actions being taken along the road (e.g.,

reduced sediment loading and elimination of magnesium chloride migration by paving the unpaved road segment, improved road drainage infrastructure between Sawmill Ponds Overlook and Death Canyon Road). Because of the limited, localized adverse impacts on water quality and the long-term beneficial effects, the selected action will not impair water quality in the park.

## **VEGETATION**

The selected action will result in some loss of vegetation due to construction of the new road alignment, the new Death Canyon parking area, and new turnouts along the Moose-Wilson Road. Short-term disturbance to vegetation will also occur due to construction activities and improvements to the road between the Sawmill Ponds Overlook and the Death Canyon Road. In addition, there will be an increase in the potential for the spread of nonnative plant species due to new ground disturbance. All of these adverse impacts would occur in a very small area of the corridor, and, relative to the project area, a small area of native vegetation will be permanently lost or altered and the vegetation that will be lost (primarily lodgepole pine forest and shrubland) is common in the project area. The selected action will not result in a substantial alteration or loss of vegetation communities or a major change in the distribution and abundance of native plant species in the project area. In addition, the selected action will have a beneficial effect on native vegetation due to removal and revegetation of the road segment between Murie Ranch Road and the base of the hill leading to Sawmill Ponds Overlook, a reduction in disturbance of roadside vegetation due to paving of the unpaved portion of the Moose-Wilson Road, and a reduction in visitor parking in nondesignated areas. Because the selected action will result in mostly localized adverse impacts that are relatively slight in nature, and, because of its long-term beneficial effects, there will be no impairment of the park's vegetation.

## **SOILS**

The selected action will result in the permanent loss or alteration of topsoil due to the development of a new road segment, improvements to the Moose-Wilson Road between Sawmill Ponds Overlook and the Death Canyon Road, construction of a new Death Canyon parking area, and new turnouts along the Moose-Wilson Road. Some additional long-term topsoil erosion will occur due to surface runoff and ditch channelization, primarily due to the new road alignment. Additional short-term disturbance of soils will occur due to construction activities. Relative to the project area, a very small area of topsoil will be permanently lost or altered. Whenever possible, soils that are disturbed will be revegetated for a long-term reduction of soil erosion. Moreover, the selected action will have several beneficial effects, including the restoration of soil and a reduction in soil compaction, erosion, and alteration, due to the removal of a road segment and the Death Canyon parking area, paving the unpaved part of the Moose-Wilson Road, and a reduction in visitors parking in nondesignated areas. Therefore, the selected action will not result in an impairment of the park's soils.

## **VISUAL RESOURCES**

Most of the visual resources in the corridor will not be affected by the selected action. Some localized adverse impacts on the visual resources of the Moose-Wilson corridor will occur due to realigning the northern segment of Moose-Wilson Road, addition of two lanes and one fee booth at the Granite Canyon entrance, placement of a vault toilet at the Granite Canyon trailhead parking lot, and development of the new Death Canyon Trailhead; the viewsheds in these areas will be slightly altered. But, the selected action will result in substantial long-term beneficial impacts on views due to



reduced vehicle congestion along the roadway and the consolidation and relocation of parking at the new Death Canyon parking area (eliminating extensive off-road parking along the Death Canyon Trailhead access road). For these reasons the selected action will not result in impairment of the park's visual resources.

## **ACOUSTIC RESOURCES AND SOUNDSCAPES**

The selected action will result in some short-term adverse effects to acoustic resources and soundscapes due to construction activities. In addition, installing officially designated turnouts along the Moose-Wilson Road may have an adverse effect due to an increase in the percentage of time that human-caused noise is audible in the locations where increased use occurs. But, most of the acoustic resources and soundscapes in the corridor will not be affected by the selected action. In addition, the selected action will result in several beneficial impacts on these resources; reducing speed limits and implementing traffic management and removing visitor vehicle use on approximately 0.9 miles of the Death Canyon Road will reduce sound levels of vehicles and percent time audibility of vehicle noise. Because the selected action will result in only slight adverse noise impacts in localized areas and will result in substantial improvements in acoustic resources and soundscapes in several areas of the corridor, the selected action will not result in impairment to the park's acoustic resources and soundscapes.

## **ARCHEOLOGICAL RESOURCES**

Under the selected action, the important archeological resources along the Moose-Wilson Road will be avoided. The segment of Moose-Wilson Road between Sawmill Ponds Overlook and the Death Canyon Road junction will be retained in its present alignment, thereby avoiding and protecting an important archeological site, 48TE498. Potential adverse impacts on currently unidentified archeological resources could result from other project actions (e.g., new construction for rerouted road segments, new horse trails), natural erosion, visitor use, ongoing NPS maintenance operations, and other factors. However, the National Park Service would continue to systematically survey lands within the Moose-Wilson corridor as needed and would record newly identified sites to avoid potential impacts. No adverse impacts on archeological resources are foreseen that would entail substantial loss of resource integrity or diminish the eligibility of the sites for the National Register of Historic Places. Consequently, implementation of the selected action will not result in impairment of the park's archeological resources.

## **HISTORIC STRUCTURES, SITES, AND CULTURAL LANDSCAPES**

Under the selected action, the overall historic character of the Moose-Wilson Road and the White Grass / Death Canyon Roads and their associated cultural landscapes will be preserved and managed without substantial modification. The segment of Moose-Wilson Road between the Sawmill Ponds Overlook and the Death Canyon Road junction will remain in its existing alignment, and the portion adjacent to wetlands will be reconstructed in its current alignment to improve natural drainage. These measures will help ensure that the road retains its designed scale and spatial arrangement as a narrow and mostly undeveloped rural road, with elements of the natural setting mostly unchanged from the period of significance. Measures will be implemented to avoid or minimize adverse impacts on other identified historic properties, viewsheds, and character-defining features of the cultural landscape along the Moose-Wilson Road corridor. Although some limited or slight adverse impacts to cultural resources were identified under the preferred alternative in the Final Plan/EIS, these are

not expected to rise to an equivalent level of adverse effect under Section 106 of the National Historic Preservation Act. No adverse impacts on historic structures, sites, and cultural landscapes are foreseen from project actions, and historic properties will retain their resource integrity and eligibility for the National Register of Historic Places. Consequently, implementation of the selected action will not result in an impairment of the park's historic structures, sites, and cultural landscapes.

## **ETHNOGRAPHIC RESOURCES**

The archeological/ethnographic sites identified within the area of potential effect will be avoided under the selected action. As necessary, NPS staff will continue to consult with associated tribes as project designs reach more detailed development stages to ensure significant ethnographic sites and resources are avoided by project actions or are appropriately mitigated. No impacts on ethnographic resources are foreseen, and NPS staff will ensure that those with traditional ties to the park continue to have access to places and resources of cultural importance. Consequently, implementation of the selected action will not result in impairment of the park's ethnographic resources.

## **CONCLUSION**

As described above, adverse impacts on the park's natural, cultural, visual, and acoustic resources anticipated as a result of implementing the selected action will not rise to a level that would constitute impairment.

## **ATTACHMENT B: VISITOR CAPACITY DETERMINATION AND ADAPTIVE MANAGEMENT**

### **VISITOR CAPACITY DETERMINATION**

Each of the four key locations within the Moose-Wilson corridor was considered in terms of its current vehicular and pedestrian use (using 2013–2014 transportation and visitor use data) and the goals and desired conditions that pertain to them. To develop a visitor capacity for the entire Moose-Wilson corridor, the respective visitor use capacities of the four key destinations were added together. The total visitor capacity for the Moose-Wilson corridor was determined to be 550 people at one time (when the road is open during peak use times). Adaptive management strategies that directly manage the volume of visitation in the corridor will be implemented to not exceed 550 people at one time. Because personal vehicles are the primary way visitors currently reach the corridor, people at one time was translated to vehicles at one time. If each vehicle is assumed to have an average of 2.7 passengers at one time (a factor developed specifically for the Moose-Wilson corridor during traffic studies), the visitor capacity translates to 200 vehicles at one time. Please note that parking lots would be managed for 90% of space during peak use times to allow for fluid traffic movement.

Summaries of the visitor capacity determined for the four key locations and the total corridor capacity are provided below. For a more detailed discussion on how these determinations were made, including desired conditions, overviews of visitor use issues, and descriptions of current use levels, please refer to the Final Plan/EIS appendix. Figure 1 depicts an overview of the visitor capacity determination, both in terms of vehicles at one time and people at one time.

When all of the individual capacities described below are combined, a total capacity of 550 people at one time (PAOT) was determined. This capacity supports current use levels within the corridor while also protecting the visitor experiences and resources with it.

#### **Death Canyon**

At this trailhead, 220 people can be accommodated at one time. Access to this trailhead is highly sought after. Large amounts of overflow parking occur during the summer. The capacity determination supports current use levels at Death Canyon Trailhead while also ensuring a high likelihood of access to the area and experiences of solitude as visitors hike on the associated trails.

#### **Laurance S. Rockefeller Preserve**

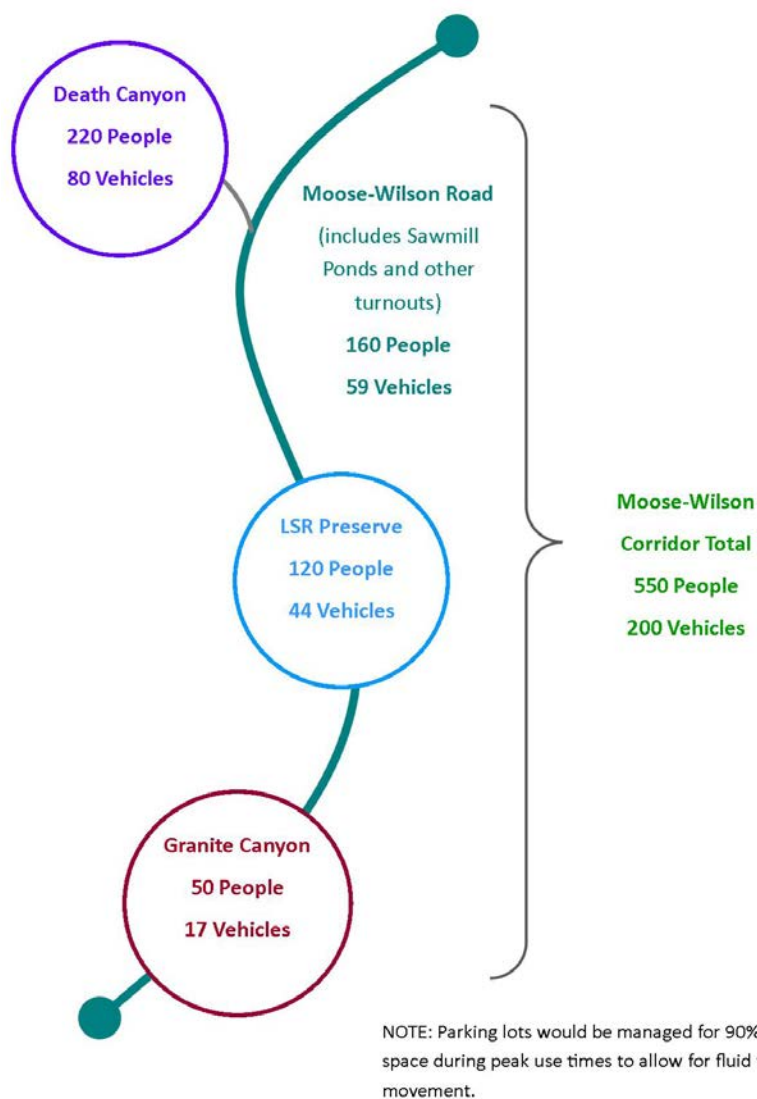
At this location, 120 people can be accommodated at one time. The LSR Preserve is one of the most popular destinations in the corridor. Current use levels support specific visitor capacities established during the creation of the preserve. The capacity determination continues the current use levels at the LSR Preserve and on the trails associated with it while also ensuring that opportunities for contemplation and solitude remain.

## Granite Canyon

At this location, 50 people can be accommodated at one time. Granite Canyon is a lower use area in the corridor; however, winter recreation is popular at this trailhead. Current use levels support visitor opportunities to view scenic vistas from this location and begin a variety of hikes. The capacity determination continues the current use levels at Granite Canyon and on the trails associated with it.

## Moose-Wilson Road

Along the roadway, 160 people can be accommodated at one time. Moose-Wilson Road itself is a destination for scenic driving as well as a way to access other destinations. The turnouts and viewing areas, such as Sawmill Ponds Overlook, associated with the road are temporary stopping areas where visitors can enjoy scenery and wildlife viewing. Current use levels support these opportunities. The capacity determination continues the current use levels along Moose-Wilson Road and at turnouts and viewing areas.



**FIGURE1. VISITOR CAPACITY OF THE MOOSE-WILSON CORRIDOR: PEOPLE AND VEHICLES AT ONE TIME**

## ADAPTIVE MANAGEMENT

Visitor use management is the proactive and adaptive process of planning for and managing characteristics of visitor use and its physical and social setting, using a variety of strategies and tools, to sustain desired resource conditions and visitor experiences. Visitor use management is important because NPS managers strive to maximize benefits for visitors while achieving and maintaining desired conditions for resources and visitor experiences in a particular area. Managing visitor access and use for visitor enjoyment and resource protection is inherently complex. It requires that managers analyze not only the number of visitors but also where they go, what they do, their impacts on resources and visitor experiences, and the underlying causes of those impacts. Managers must acknowledge the dynamic nature of visitor use, the vulnerabilities of natural and cultural resources, and the need to be responsive to changing conditions.

The monitoring component of the visitor use management framework described in the Final Plan/EIS will be used to test the effectiveness of management actions and provide a basis for informed adaptive management of visitor use. Please refer to the indicators and thresholds found on pages 82–96 of the Final Plan/EIS for more information about this adaptive approach. Monitoring indicators helps NPS staff determine the most effective way to manage visitor use to attain desired visitor experiences and resource conditions. As monitoring of conditions continues, managers may decide to modify or add indicators if better ways are found to measure important changes in resource and experiential conditions. Information on the NPS monitoring efforts, related visitor use management actions, and any changes to the indicators and thresholds would be available to the public.

If additional traffic management measures are needed in the future, adaptive management approaches will also be considered, such as a permit, reservation, or transit system to manage visitor capacity within the corridor. If visitor patterns change significantly in the future and the majority of visitors are spending much longer periods of time in the corridor, then the National Park Service will implement adaptive management strategies to ensure that short-term parking or access will continue given the desire to have a range of visitor experiences available in the corridor. This could be accomplished by establishing short-term and long-term parking spaces at destinations.

If it is determined through monitoring that observed conditions do not match desired conditions for the corridor, the National Park Service could adjust the 550 people at one time capacity either up or down in order to achieve the goals of the plan.

The National Park Service will actively seek input and collaborate with interested stakeholders on implementing future adaptive management measures related to the visitor capacity of the corridor. Prior to making any changes based on monitoring and adaptive management that would result in substantive modifications to visitor use patterns/capacity or the condition of park resources, the park will notify the public, interested stakeholders, tribes, and the cooperating agencies in order to solicit public input/comment.







# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
5353 Yellowstone Road, Suite 308A  
Cheyenne, Wyoming 82009



In Reply Refer To:  
06E13000-2016-F-0064

**JUN 06 2016**

### Memorandum

To: Superintendent, National Park Service, Grand Teton National Park, Moose, Wyoming

From: Acting Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office, Cheyenne, Wyoming

Subject: Endangered Species Act Section 7 Consultation for the Moose-Wilson Corridor Draft Comprehensive Management Plan/EIS Project

This correspondence transmits the U.S. Fish and Wildlife Service (Service) biological opinion in response to the Grand Teton National Park (Park) request for consultation for the impacts from the Park's Moose-Wilson Corridor Project (proposed action) to the federally threatened grizzly bear (*Ursus arctos horribilis*), the Canada lynx (*Lynx canadensis*), and the gray wolf (*Canis lupus*) in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). Your December 11, 2015, request for formal consultation and the attached biological assessment (BA) were received in our office on December 11, 2015.

Pursuant to section 7(a)(2) of the ESA (50 CFR §402.14), the attached biological opinion addresses the effects of the proposed action on grizzly bears, Canada lynx, and gray wolves. The biological opinion is based on information provided in the BA prepared by the Park, received on December 11, 2015.

On March 18, 2016, you requested informal consultation with an attached BA for the federally threatened yellow-billed cuckoo (*Coccyzus americanus*) in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). This memorandum addresses the effects of the proposed actions on the yellow-billed cuckoo.

The proposed action will guide management, use, and development of the Moose-Wilson Corridor for years to come. Specific elements of the proposed action include: provide queuing lanes on the north and south ends of the corridor; reconstruct and pave the existing, unpaved portion of the Moose-Wilson Road, retaining the current alignment; repair and resurface existing portions of Moose-Wilson Road; incorporate a "safety edge" to improve the edge of the

pavement and allow errant vehicles to safely return to the road; realign the northernmost segment of the Moose-Wilson Road; abandon the 0.6-mile section of roadway between Murie Ranch road and Sawmill Ponds and restore this section to natural conditions; construct a new road segment to intersect with Teton Park Road at the junction with the Chapel of the Transfigured Road; reconstruct the portion of the road between Sawmill Ponds Overlook and the Death Canyon Road junction adjacent to the wetlands to improve wetland function, correct drainage issues, and improve road conditions; install officially designated parking turnouts along Moose-Wilson Road; install a vault toilet near the parking lot of Granite Canyon Trailhead; relocate Death Canyon Trailhead to the current end of the pavement on the existing access road; provide parking at the trailhead; convert the existing 1.0-mile unpaved portion of the trailhead access road to a trail; and relocate the restroom [Death Canyon Trailhead] to the new trailhead location. The proposed action continues northeast off of Wyoming Highway 390 intersecting Teton Park Road and Chapel Road within Grand Teton National Park, Moose, Wyoming in Teton County.

Yellow-billed Cuckoo: The habitat along the Corridor consists mainly of riparian woodlands with native broadleaf trees and shrubs. This habitat is in patches less than 1 acre in size and occurs within 200 meters of the construction areas within the Corridor. While yellow-billed cuckoos usually nest in large riparian galleries with dense understories, generally 40 acres or larger, in Wyoming, we recommend evaluation of habitat as small as 12.5 acres in size. Because habitat patches along the Corridor are smaller than 12.5 acres, we do not expect yellow-billed cuckoos to nest adjacent to the Corridor.

The Spread Creek Gravel Pit (Pit) will provide the source material for the Moose-Wilson Corridor (Corridor) Project. There are approximately 320 acres of cottonwood riparian habitat with a shrub understory within 1 mile of the Pit that may contain suitable nesting and foraging habitat for the yellow-billed cuckoo. There will be no removal or disturbance to vegetation around the Pit, though there is a small possibility for yellow-billed cuckoos to be disturbed by noise generated by the Pit, if they are in the area. Due to limited habitat and few observations in the area, it is unlikely that yellow-billed cuckoos will occur near the Pit.

The Teton Science School monitors avian productivity and survivorship at monitoring stations in the Park yearly. In July 2000, there was one confirmed observation of a yellow-billed cuckoo in the Park, otherwise no cuckoos have been found or reported in years of observation. The Park will conduct surveys for yellow-billed cuckoo in potential habitat around the Pit and in the Corridor. In the unlikely event that yellow-billed cuckoos are detected anywhere in the action area, the Park will consult with the Service to establish conservation measures to ensure no adverse effects on the species. Based on the information provided in your BA of March 18, 2016, the Service concurs with your may affect not likely adversely affect determination for the yellow-billed cuckoo.

#### Consultation History:

- April 1, 2015—Park wildlife biologist Sarah Dewey contacted Ann Belleman formerly of my staff to discuss Park Projects and solicit input on addressing potential impacts to grizzly bears;
- August, 2015—Sarah Dewey had a follow up conversation with Lisa Solberg Schwab to further discuss impacts to grizzly bears and appropriate effects determinations;

- September 1, 2015—Lisa Solberg Schwab and John Stephenson of the Park discussed the inclusion of the Snake River gravel pit into the CMP/EIS action area;
- October 7, 2015—John Stephenson spoke with Nathan Darnall of the Service to discuss the action area and potential impacts of sound from the Spread Creek Gravel Pit;
- October 7, 2015 —John Stephenson requested and received a list of federally listed plant and animal species, and designated critical habitat that may occur in the action area using the Service Information and Planning and Consultation (IPaC) website;
- October 20, 2015—John Stephenson spoke with Lisa Solberg Schwab to discuss potential impacts of sound on Canada lynx;
- November 25, 2015— John Stephenson spoke with Lisa Solberg Schwab to discuss the timing and preparation of this BA and questions related to Canada lynx designated critical habitat, grizzly bears, and yellow-billed cuckoo; and
- December 3, 2015— John Stephenson spoke with Lisa Solberg Schwab to discuss wildlife mortality related to construction vehicles.

A complete administrative record of this consultation is on file at the Wyoming Ecological Services Field Office in Cheyenne, Wyoming. If you have any questions regarding this consultation, please contact Lisa Solberg Schwab of my office at the letterhead address or phone (307) 367-5340.

#### Attachment 1 (Biological Opinion)

cc: GTNP, Wildlife Biologist, Moose, WY (J. Stephenson) (john\_a\_stephenson@nps.gov)  
 WGFD, Statewide Non-Game Bird and Mammal Program Supervisor, Lander, WY  
 (Z. Walker) (zack.walker@wyo.gov)  
 WGFD, Statewide Habitat Protection Coordinator, Cheyenne, WY (M. Flanderka)  
 (mary.flanderka@wyo.gov)  
 WGFD, Habitat Protection Secretary, Cheyenne, WY (N. Stange) (nancy.stange@wyo.gov)  
 WGFD, Statewide Large Carnivore Section Supervisor, Lander, WY (D. Thompson)  
 (daniel.thompson@wyo.gov)

# ARTS. PARKS. HISTORY.

Wyoming State Parks & Cultural Resources

State Historic Preservation Office  
2301 Central Ave.  
Cheyenne, WY 82001  
Phone: 307-777-7697  
Fax: 307-777-6421  
<http://www.shpo.state.wy.us>

September 1, 2016

David Vela, Superintendent  
U.S.D.I. National Park Service  
Grand Teton National Park  
P.O. Drawer 170  
Moose, WY 83012

re: Class I Cultural Resource Inventory of the Moose-Wilson Road; NHPA S106 Consultation for the Moose-Wilson Corridor Comprehensive Management Plan for Grand Teton National Park (SHPO File # 0214ECK006)

Dear Mr. Vela:


Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced undertaking. We have reviewed the associated report and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42). We concur with the APE and your finding that sites 48TE498, 48TE1004, and 48TE1205 are eligible for listing in the National Register of Historic Places and will not be adversely affected by the undertaking as planned.

We recommend Grand Teton National Park allow the undertaking to proceed in accordance with state and federal laws subject to the following stipulation:

If any cultural materials are discovered during construction, work in the area shall halt immediately, the federal agency and SHPO staff be contacted, and the materials be evaluated by an archaeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

This letter should be retained in your files as documentation of a SHPO concurrence with your finding of no historic properties affected. Please refer to SHPO project 0214ECK006 on any future correspondence regarding this undertaking. If you have any questions, please contact me at 307-777-6311.

Sincerely,



Mary Hopkins

Wyoming State Historic Preservation Officer

Cc: Darin Westby, P.E., Director, State Parks and Cultural Resources  
Sara Needles, Division Administrator, Cultural Resource  
Jeremiah Reiman, Governor Matt Mead's Policy Advisory



Matthew H. Mead, Governor  
Darin J. Westby, P.E., Director