

**National Park Service
U.S. Department of the Interior**

**Grand Teton National Park
Moose, Wyoming**



JENNY LAKE RENEWAL PLAN FINDING OF NO SIGNIFICANT IMPACT

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) has prepared an Environmental Assessment (EA) to analyze the impacts of proposed renewal and renovation actions in the Jenny Lake area of Grand Teton National Park (park).

The historic Jenny Lake area is one of the most popular day-use areas in the park, with approximately 1.8 million park visitors each year (70 percent of park visitors come to the area). Both visitor information and services are provided in the Jenny Lake area in addition to access to numerous trails and Jenny Lake itself.

For decades, visitors to frontcountry and backcountry areas around Jenny Lake have gathered in confined use areas and on narrow trails, creating crowding and severe deterioration of the main trail corridors and overlooks. In many areas, the trails were built in the 1930s and were not designed to accommodate today's large number of visitors. Current conditions substantially reduce the quality of visitor experience as well as degrade the resources.

Grand Teton National Park is proposing to renovate trails and facilities in four key use areas in the Jenny Lake area; these key areas are linked by the Jenny Lake Loop Trail system. The purpose of the Jenny Lake Renewal Plan is to create a master plan for the Jenny Lake area that will provide a safe, environmentally sensitive, and enhanced visitor experience. The plan will restore the backcountry areas of the Jenny Lake trail system, including Inspiration Point and Hidden Falls overlooks, and make improvements in the frontcountry areas of the South Jenny Lake developed area, Jenny Lake Overlook, and String Lake Outlet. The plan is needed to address several conditions at these key areas including: aging and/or poorly designed trails and walkways that do not meet current trail standards, including inadequate access for people with disabilities; confusing frontcountry and backcountry trail systems; aging and failing bridges; user-created trails causing resource degradation; limited self-guided interpretation/orientation; compacted soils and bare ground in destination areas; and outdated and undersized water and wastewater systems and restrooms.

SELECTED ACTION

Alternative B represents the NPS plan for improving existing conditions at Jenny Lake and has been selected for implementation. The purpose of the Jenny Lake Renewal Plan is to provide a safe, environmentally sensitive, and enhanced visitor experience at Jenny Lake. Renovation of the frontcountry and backcountry areas of Jenny Lake will be sustainable and durable. Features and activities will be implemented that are of a quality, scale, and character that complements this historic area, protects park resources, and elevates visitor experiences. The project will be constructed by park trail crews as well as contractors over multiple construction seasons.

The frontcountry effort encompasses the South Jenny Lake developed area and extends along the shoreline west to the public boat launch. To the east, the project area extends to the Jenny Lake

Campground. The frontcountry also includes the Jenny Lake Overlook along the one-way scenic loop and the String Lake Outlet trailhead area. The frontcountry effort was designed in large part to address the need for improved visitor orientation and interpretation and to improve visitor circulation throughout the South Jenny Lake developed area.

The backcountry design and construction work includes rerouting and restoration of some trails, addressing circulation and crowding, and improving viewing areas. The backcountry effort encompasses the area west of the public boat launch on South Jenny Lake around the lake to Hidden Falls and Inspiration Point. This effort includes the west boat dock, the Hidden Falls/Inspiration Point viewing areas, and associated trails in this area. Most of the backcountry portion of the project area is recommended wilderness. A wilderness minimum requirement analysis has determined that helicopter transport and the use of mechanized tools and equipment are the minimum tool needed to successfully accomplish the project.

MITIGATION MEASURES

Under the selection action, a number of mitigation measures will be implemented to reduce the potential for adverse impacts to resources within the park. The list of mitigation measures is included at the end of this document in Appendix A.

ALTERNATIVES CONSIDERED

Two alternatives were evaluated in the EA including the no action alternative and one action alternative. Under Alternative A, No Action, the NPS will continue to manage NPS visitor services at Jenny Lake as it currently does. Routine maintenance of trails and facilities will continue as funds are available, but overall upgrades and redesign to the trails and facilities in the Jenny Lake area will not occur and there will be few changes in visitor facilities or access. Alternative B, Jenny Lake Renewal, is the selected action, as described in the previous section.

During the planning process, a number of additional management actions were considered but eliminated from detailed study. See *Alternative Development* section and *Alternatives (Actions) Considered and Dismissed* section in the EA for more details.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

According to the Council on Environmental Quality (CEQ) regulations implementing NEPA (43 Code of Federal Regulations (CFR) 46.30), the environmentally preferable alternative is the alternative “that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative.”

Alternative B is the environmentally preferable alternative for several reasons: 1) The upgraded trails and facilities will ensure the sustainability of these park assets; 2) The improvements will help protect hydrologic, soil, and vegetative resources at the site through stabilization and restoration to natural habitat of previously disturbed areas (e.g., user-created and redundant trails); 3) Trails will be improved thereby reducing the risk of injury for visitors hiking on these trails; 4) Improved trails and new and improved overlooks and viewing areas will provide aesthetically pleasing surroundings in the frontcountry; 5) Actions taken will provide more protection and interpretation of the area’s cultural resources and natural resources; 6) This alternative provides a variety of different opportunities for people of all abilities through improvements in route-finding and interpretation as well as improving Architectural Barriers Act Accessibility Standards (ABAAS)

compliance; 7) By making trail circulation more intuitive, improving the trail surface, and making overlooks and viewing areas more defined, this alternative will protect resources and help to achieve a balance between visitor use and resource protection; and 8) Water system upgrades will protect employee safety and welfare; improve operational efficiency and sustainability; and conserve water resources. For these reasons, Alternative B causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources, thereby making it the environmentally preferable alternative.

By contrast, Alternative A (No Action) is not the environmentally preferable alternative because, although there will be no construction or ground disturbing activities that will damage previously undisturbed elements of the biological, cultural, and physical environment, this alternative will result in the following: 1) Resource deterioration will continue due to impacts in high use areas, including user-created trails resulting from the confusing trail system; 2) There will be continued lack of accessible trails ; and 3) The water and wastewater systems are not sustainable with regards to energy use and water loss from breaks and leaks in the system.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR 1508.27, significance is determined by examining the following criteria:

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

No major adverse or beneficial impacts were identified that will require analysis in an environmental impact statement (EIS). No greater than moderate, adverse impacts will result to any resource from implementation of the selected action.

Moderate adverse effects will occur to cultural resources, wilderness character, natural soundscapes, visitor experience, and park operations. These effects will primarily be short term, occurring during construction, and/or will be mitigated through several mechanisms, including the Programmatic Agreement that addresses impacts to cultural resources and the Minimum Requirement Analysis that addresses wilderness.

Moderate beneficial effects will result to cultural resources, visitor experience, and park operations. There will be a moderate beneficial impact on the historic backcountry trails. Improved firefighting capability from the replacement of the Jenny Lake water system will result in long-term, moderate, beneficial effects on historic properties. In the long term, the project efforts will result in moderate beneficial impacts to visitor experience because of the planned improvements. There will be a long-term, moderate beneficial impact on park (and concessioner) operations, as well as the health and safety of visitors and employees as a result of replacing the water and wastewater systems, allowing for a safer work environment for fire personnel responding to structural fires, and the ability of the NPS to protect life and property in case of a fire.

Degree of effect on public health or safety

The selected action includes a number of actions that will improve public health and safety. The drop-off area at South Jenny Lake will be redesigned and a pedestrian crossing will be added at the current terminus of the multiuse pathway. These changes will substantially increase visitor safety in this drop-off area. The multiuse pathway bike parking area will be reconfigured to provide more parking and a safer and more efficient use of space for pathway users who want to enter the South Jenny Lake area. A flush concrete curb will delineate the South Jenny Lake Interpretive Plaza from the parking and substantially expand the accessibility along the entire length of the drop-off area.

The selected action addresses concerns about the current water/wastewater system being able to ensure adequate capacities for potable water, firefighting water, and wastewater management. The selected action will replace existing system components with new, modern equipment that will greatly increase system reliability. Facilities will be sized to meet future demand and will meet all current standards plus any regulations that will foreseeably be promulgated, such as more stringent wastewater treatment. These features will have beneficial effects on park and concessioner operations and visitor and employee safety by providing high quality drinking water and reducing the potential for system shutdowns. Long-term, beneficial effects will result from providing dependable and adequate water delivery, allowing for a safer work environment for fire personnel responding to structural fires, and the ability of the NPS to protect life and property in case of a fire. Overall, the result will be a long-term moderate beneficial impact on park (and concessioner) operations, as well as the health and safety of visitors and employees.

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 selected action will not impact unique characteristics of the area including park lands, prime farmlands, wild and scenic rivers, or ecologically critical areas because these resources are not present in the project area. In October 2013, a wetland survey was conducted in areas where disturbance near wetland habitats will occur to determine the presence or absence of wetlands. No wetlands were located within the potential areas of disturbance and therefore wetlands will not be impacted.

Currently, a total of nine National Register of Historic Places (NRHP) listed/eligible historic properties are located within the Jenny Lake Renewal Project Area of Potential Effects (APE). Eight of the properties are located in the frontcountry, and one is located in the backcountry. Four of the frontcountry properties are prehistoric, while the other four frontcountry properties and one backcountry property are historic. The selected action will result in negligible to moderate impacts on these resources.

Degree to which effects on the quality of the human environment are likely to be highly controversial

Throughout the EA process, the proposal to rehabilitate trails and facilities in the Jenny Lake project area was not controversial and the effects are not expected to generate future controversy. Public scoping and comments on the proposal did not indicate any substantive contentious issues.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

No highly uncertain effects or unique or unknown risks are anticipated to occur with implementation of the selected action. This action will upgrade trails and facilities to improve visitor experience and resource protection. The effects of rehabilitating trails and updating facilities are fairly straightforward and do not pose uncertainties. Standard construction and operation techniques, best management practices, and other mitigation will be employed and will minimize risks. The environmental process has not identified any effects that may involve highly unique or unknown risks.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The selected action will not set a precedent for future actions with significant effects, and it does not represent a decision in principle about any future consideration in Grand Teton National Park or elsewhere in the national park system. The actions proposed are similar to other NPS redevelopment and restoration projects.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

As demonstrated in the EA, this action will not result in any significant cumulative impacts.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Ground disturbing activities from project-related construction from improvements to trail circulation, the Boat House Overlook, water and wastewater systems, Cottonwood Creek Beach, and the String Lake Outlet will impact known archeological sites. After applying the criteria of the Advisory Council on Historic Preservation (ACHP) for adverse effects (36 CFR 800.5, Assessment of Adverse Effects), the NPS concludes that implementation of the selected action will have an adverse effect on three of the nine cultural resources in and near Grand Teton National Park that are listed, or eligible for listing, in the NRHP (sites 48TE411, 48TE412, and 48TE414). This will result in long-term, direct, localized, moderate, adverse effects and will constitute an adverse effect under section 106 of the National Historic Preservation Act (NHPA). As a result, a Programmatic Agreement will be entered into with Wyoming State Historic Preservation Office (SHPO) and consulting parties, tribes, and the ACHP to mitigate these adverse effects.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The selected action will not adversely affect an endangered or threatened species or its critical habitat. In August 2012, the NPS sent a scoping letter to the U.S. Fish and Wildlife Service (USFWS), Wyoming Ecological Services Office, notifying them of the Jenny Lake Renewal project. No concerns were identified by the USFWS at that time. The analysis in the EA determined that the selected action *may affect but will not likely adversely affect* grizzly bear, Canada lynx, wolverine, greater sage-grouse, and yellow-billed cuckoo. The EA was forwarded to the USFWS as the consultation document pursuant to section 7 of the Endangered Species Act. The park received concurrence on the *may affect, not likely to adversely affect* determination from the USFWS on March 12, 2014, thereby completing section 7 consultation.

Whether the action threatens a violation of Federal, state, or local environmental protection law

This action does not violate any federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT AND CONSULTATION

A 30-day public scoping period for the Jenny Lake Renewal Plan was conducted from August 17, 2012, through September 15, 2012. During this time, the NPS provided information about the renewal plan and the public scoping period through a number of means including: posting on the NPS Planning, Environment, and Public Comment (PEPC) website; an electronic press release and a press release published in the *Jackson Hole News and Guide*; public scoping postcards mailed to approximately 575 individuals, agencies, and organizations; a radio segment regarding the project on Jackson Hole Radio; 750 scoping postcards distributed to park visitors; posting on the National Parks Traveler website; scoping letters mailed to the Tribal Chairs of the park's 18 affiliated tribes, the USFWS, Wyoming Department of Fish & Game, and Wyoming SHPO.

During the 30-day public scoping period, the park received 33 letters (i.e., comment cards, PEPC comments, and letters) from 28 individuals, one agency, and four organizations. All correspondence that was received was entered into the PEPC system either from direct entry by the commentor or uploading of comment postcards and hard copy letters by NPS staff. These letters were carefully reviewed and individual comments were identified. The analysis of these letters identified 108 discrete, substantive comments. Each of the comments was considered and incorporated into the plan as applicable.

During the development of the EA, the park informed traditionally associated tribes of the project; of those invited to participate, three traditionally associated tribes expressed interest and participated in government-to-government consultation with the park. Details about this consultation are included in the next section.

The Jenny Lake Renewal Plan EA was made available for public review and comment during a 30-day period ending March 15, 2014. A total of 18 comment letters were received. Substantive comments to the EA centered on the following topics: visitor experience; concession operations; resource degradation; horse use; parking; viewsheds; telecommunications; accessibility; safety; route-finding; education and interpretation; infrastructure; cultural resources; and pathways. These concerns resulted in minor changes to the text of the EA and are addressed in errata sheets attached to this Finding of No Significant Impact.

NATIONAL HISTORIC PRESERVATION ACT (NHPA) SECTION 106 CONSULTATION

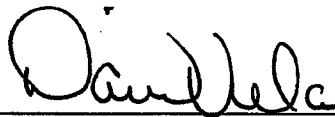
Grand Teton National Park initiated section 106 consultation under the NHPA with the Wyoming SHPO on August 20, 2012. The park invited traditionally associated tribes, consulting parties and the ACHP to participate in the Section 106 consultation process in December of 2013. Of those invited, the park received interest from three traditionally associated tribes (Crow Tribe of Montana, the Shoshone Tribe of the Wind River Reservation [Eastern Shoshone], and the Shoshone-Bannock Tribes of the Fort Hall Reservation); the ACHP; the Alliance for Historic Wyoming; and the Jackson Hole Historical Society and Museum. Tribal Representatives from the Crow Tribes, the Shoshone Tribe of the Wind River Reservation, and the Shoshone-Bannock Tribes traveled to Grand Teton for a government-to-government tribal consultation meeting on February 13, 2014. During this meeting, park employees explained the Jenny Lake Renewal Project and the associated cultural resources to tribal representatives, and tribal representatives expressed their opinions and concerns involving the project. Three consultation meetings with all consulting parties, ACHP and the Wyoming SHPO occurred on February 25, 2014, March 3, 2014, and April 7, 2014. During the April 7th meeting, the park, ACHP, and the SHPO agreed to sign the Programmatic Agreement that was developed to resolve the adverse effects to cultural resources.

CONCLUSION

As described above, the selected action does not constitute an action meeting the criteria that normally requires preparation of an EIS. The selected action will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from short- to long-term, and negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the NRHP, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:

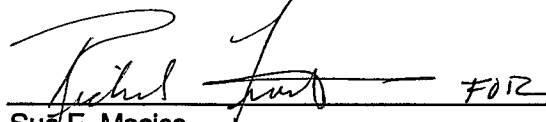


David Vela
Superintendent,
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APR 25 2014

Date

Approved:

 FOR

Sue E. Masica
Regional Director, Intermountain Region

4/28/14

Date

ERRATA SHEETS

JENNY LAKE RENEWAL PLAN ENVIRONMENTAL ASSESSMENT

GRAND TETON NATIONAL PARK

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal.

Some substantive comments may result in changes to the text of the EA, in which case, they are addressed in the Text Changes section of the Errata Sheets. Other substantive comments may require a more thorough explanatory response and are addressed in the Response to Comments section. NPS responds to all substantive comments in either or both of these sections.

TEXT CHANGES

Changes made to the EA as a result of the public comments as well as those resulting from internal review are listed below.

1. Modification to Relationship to Other Plans and Policies, Transportation Plan, Grand Teton National Park (2006) on page 14 of the EA: Add the following:

“The 2006 Transportation Plan EIS and 2007 Record of Decision analyzed the multiuse pathway from the town of Jackson to South Jenny Lake, where it currently terminates. From this terminus, the plan also analyzed connecting South Jenny Lake to North Jenny Lake, bypassing the South Jenny Lake developed area. Should funding become available and conditions remain unchanged since the 2007 Record of Decision, the park has the authority to implement the section from South Jenny Lake to North Jenny Lake based on the previous compliance.

The NPS does not want to encourage bicycling in the South Jenny Lake developed area. This is a visitor use area designed for high density pedestrian activity. It was the intent of the 2006 Transportation Plan EIS and 2007 Record of Decision, as well as this plan, for bicyclists to disembark their bikes at the north terminus of the multiuse pathway and leave them at the bike racks before entering the Interpretative Plaza.”

2. Modification to Table 7, pg 106: Add Peregrine falcon, *Falco peregrinus*, to the table. WGFD status: NSS3; Habitat: Montane, Alpine; Potential: Likely.

3. Modification to general wildlife description in Appendix C, pg 194: Add the following at the end of the description on Forest Species:

“Alpine Species. Peregrines are cliff nesting falcons that mainly eat other birds. The lower elevations of the major Teton Range canyons provide extensive opportunities for cliff-nesting and diverse foraging habitats for peregrines. Decimated by DDT, it is believed that peregrine falcons were extirpated from the Greater Yellowstone Ecosystem by the 1960s. In 1980, efforts to reintroduce peregrine falcons to the park were initiated in conjunction with similar efforts elsewhere in the Greater Yellowstone Ecosystem and western U.S. Between 1980 and 1986, 52 fledgling falcons were released at several hack sites in the park. The local population of peregrine falcons has been monitored since 1987 when, subsequent to the reintroduction effort, the first nesting attempt was verified at Glade Creek. The first successful breeding was documented in 1988. After sufficient recovery was achieved across their range, peregrines were delisted from the endangered species list in 1999. However, peregrine falcons remain a species of greatest conservation need (NSS3, Tier II) in Wyoming, and only four nesting pairs exist in Grand Teton National Park. The Baxter’s nest area at the mouth of Cascade Canyon was first discovered in

2010, and it has produced one chick in three of the last four years (2010, 2011, and 2013). Peregrines can be sensitive to human disturbance, especially during their nesting period. When occupied, a public closure around the nest site has been implemented to protect the birds from human disturbance and to protect climbers from the peregrines as they will defend their nest site by dive-bombing perceived intruders.

The nest site is approximately ¼ mile from the Horse Trail and less than ½ mile from Inspiration Point. The nesting birds may be disturbed by project work, especially helicopter activity in the vicinity of the nest. Impacts to nesting peregrines can be minimized by maintaining a ¼ mile buffer from the nest where no flights would occur. Helicopter activity should not occur during the dawn and dusk periods and should occur as close to the middle of the day as possible to minimize disturbance to nesting peregrines. Peregrine nesting season runs from mid-April through mid-August. Whenever possible, helicopter landings should occur outside this time frame, especially for the proposed drop locations close to the ¼ mile buffer, e.g., along the Horse Trail. Under no circumstances should the helicopter fly over or along the cliffs where the nest is located. Communication should occur with Science and Resource Management personnel in regards to timing of helicopter flights so that impacts to the nesting birds can be documented, and to allow for new mitigations to be suggested.”

4. Modification to Wildlife and Special Status Species Mitigation section, pg 70: Add the following:

“To avoid potential impacts to nesting peregrine falcons, a ¼ mile closure around the nest site will be implemented where no helicopter use will occur. Whenever possible, helicopter landings, especially those close to the ¼ mile buffer, e.g., on the Horse Trail, will occur after mid-August during the post-fledging period. Communication regarding the timing of helicopter flights and load drops will occur with Science and Resource Management staff so that the peregrine nest site can be monitored for potential impacts.”

5. Modification to Impact Analysis for Special Status Species section, pg 114: Add the following:

“There is a known peregrine falcon nest site on the south-facing cliffs at the mouth of Cascade Canyon that has been occupied since 2010. Impacts to nesting peregrines can be minimized by maintaining a ¼ mile buffer from the nest where no helicopter activity would occur. To the extent possible, all helicopter project work should occur after mid-August during the post-fledging period to avoid potential impacts on peregrines. Helicopter work should also be avoided during the early morning and late evening time periods to mitigate effects on nesting peregrines. Indirect effects to peregrine falcons including possible abandonment of the nest site could occur under Alternative B.”

6. Modification to the EA to change Memorandum of Agreement (MOA) to Programmatic Agreement (PA). During consultation with the Wyoming SHPO, a recommendation to complete a PA in lieu of an MOA was proposed. The recommendation allows the park to continue consultation on the mitigation of adverse effects in the frontcountry, while allowing work to proceed in the backcountry where no adverse effects have been identified.

RESPONSE TO COMMENTS

Substantive comments to the Jenny Lake Renewal Plan EA centered on the following topics: visitor experience; concession operations; resource degradation; horse use; parking; viewsheds; telecommunications; accessibility; safety; route-finding; education and interpretation; infrastructure; cultural resources; and pathways. The paraphrased substantive comments as well as park responses are included below.

Visitor Experience

Comment: Visitor experience is degraded because of the high volume of visitors to the west side of the lake.

Response: This EA does not affect current visitation levels to the Jenny Lake area. Specifically, it does not expand parking areas, or authorize additional shuttle boat access. Instead, this project intends to update facilities and interpretation to accommodate existing levels of visitation. Future visitation studies and social surveys in the Jenny Lake area will assist the NPS in determining the appropriate level of travelers to the backcountry areas of Jenny Lake. This information will determine how many people are using the area, as well as their perception of crowding. Once there is reliable and comprehensive information/data regarding the acceptable numbers of visitors in the backcountry, the park can use this information to make decisions about future use when the existing boat concession contract is up for renewal.

Comment: The proposed Interpretive Plaza is an improvement but the area should be expanded to meet demand and address visitor congestion.

Response: The design of the new Interpretive Plaza will be more efficient and intuitive – so visitors can reach their destination more quickly – and will more than double in size, from approximately 3,000 to approximately 7,000 square feet. In addition, the increased number of restrooms will result in less time waiting.

Concession Operations

Comment: The agreement with Jenny Lake Boat concession should not be renewed.

Response: A concessioner-operated boating service has been providing transportation to the west side of the lake since the 1930s. The park has determined this type of commercial service is necessary and appropriate for the public use and enjoyment of the Jenny Lake area, as it provides the opportunity for visitors with a wide range of abilities to access the wilderness.

Comment: NPS should consider restricting the numbers of boat trips to reduce the large numbers of people accessing the trails.

Response: This EA does not affect current visitation levels to the Jenny Lake area. Specifically, it does not expand parking areas, or authorize additional shuttle boat access. Instead, this project intends to update facilities and interpretation to accommodate existing levels of visitation. As stated above, future visitation studies and social surveys in the Jenny Lake area will assist the NPS in determining the appropriate level of travelers to the backcountry areas of Jenny Lake. This information will determine how many people are using the area, as well as their perception of crowding. Once there is sound and comprehensive information/data regarding the acceptable numbers of visitors in the backcountry, the park can use this information to make decisions about future use when the existing boat concession contract is up for renewal.

Resource Degradation

Comment: The park should maintain views of Jenny Lake; if it gets overgrown with scrub and the views are inaccessible, people go off-trail and trample vegetation.

Response: Under the selected action, lake access areas will be better identified and overlooks will be improved. Trail improvements will reduce the likelihood of user-created trails and previously disturbed areas will be rehabilitated. Historic vistas will be preserved in the Jenny Lake frontcountry area. Within the recommended wilderness, clearing will take place within the acceptable limits of normal backcountry trail maintenance which has undergone the “minimum requirement” for all activities that affect the wilderness resource and character of the park.

Comment: The lakeshore has many ad-hoc beaches around the lake, and vegetation is trampled by people accessing the lake in these areas. Erosion is a problem around the lakeshore, and vegetation is sparse in the campground.

Response: Overlooks and access areas will be created that will reduce the likelihood of user-created trails and previously disturbed areas will be rehabilitated.

Comment: The shoreline between South Jenny Lake and the campground is highly eroded from many opportunistic trails, as people try to access the lake.

Response: There are numerous social trails throughout the Jenny Lake southeast shoreline. Although work in this area is not analyzed in the EA, any work performed here will fall under the type of activities normally conducted under the Trails Programmatic Categorical Exclusion, and therefore can be done at a later date.

Comment: Backcountry areas on the west lakeshore are degraded by the crowds. Bridges and trails have fallen into disrepair and signing in the area is not intuitive.

Response: Improvements to bridges, viewing areas, and trails in the backcountry are a large component of the project. These improvements will reduce degradation of resources.

Comment: The overlooks will not prevent visitors from going down to the lake, but will enlarge the affected area as people walk/scramble down the sides to the water.

Response: The NPS believes that with proper design, overlooks are an effective way to prevent further degradation. Design of the overlooks will take into consideration access to the lake from the overlook, while trying to limit additional resource degradation.

Comment: It is not a good idea to harden the shoreline, especially on a lake as naturally stable as Jenny Lake, where there is no history of storm or flood event disturbance. Construction of large overlooks will destabilize the shoreline's natural vegetation and benthic areas.

Response: The NPS is considering this and will provide this information to the design team. It is believed that with proper design, overlooks can be constructed in a way that will not cause destabilization or resource damage.

String Lake Trail

Comment: There are currently issues with bikes and baby strollers going around String Lake. Concerned that widening this path will exacerbate the problem.

Response: Widening the trail around String Lake is beyond the scope of this plan. Bicycles will remain unpermitted on the unpaved trails at String Lake.

Horse Use

Comment: Due to high visitor numbers, riders seldom visit the Jenny Lake area in peak season. However, in shoulder seasons a number of trail segments are used: String Lake parking lot to Trapper Lake via Leigh Lake; String Lake parking lot to Paintbrush Canyon; the loop around String Lake; and String Lake parking lot to Cascade Canyon via the Horse Trail. Conditions of a number of trails were described. On horse trails with sharp elevation changes, the park should keep the steps placed far apart for equestrian safety in wet, slippery conditions. Horse access should be continued from the south, on the west side of Cottonwood Creek. The park should upgrade the hitching post specifications.

Response: Some of the trails mentioned above are out of the project area or not within the scope of the EA. The String Lake parking lot to Trapper Lake via Leigh Lake, the parking lot to Paintbrush Canyon, and the String Lake Loop are all out of scope of the EA. Within the segment from the String Lake parking lot to Cascade Canyon via the Horse Trail, the String Lake Outlet and the Horse Trail are included in the project area. All trails listed, but not addressed in the EA, will continue to receive regular trail maintenance. Within the project area, any new steps installed will be properly placed to allow for a horse to safely traverse. There is a horse ford at the String Lake Outlet Bridge for easy crossing of Cottonwood Creek.

Parking

Comment: NPS needs to address the parking situation at South Jenny Lake, including size/design and landscaping.

Response: As stated on page 24 of the EA, the park's overall strategy for managing existing parking areas is to strive for no net gain of impervious surfaces and to make the best, most efficient use of existing paved areas through modifications. The park is working with Western Federal Lands Highway Division on striping design and other methods to make parking at South Jenny Lake more efficient without increasing the physical size of the parking lot. The park will also continue to explore systems of visitor education and messaging about timing and availability of parking at Jenny Lake. It should be noted that the size of the parking lot generally limits the number of people arriving by personal vehicle to the South Jenny Lake area, thereby reducing crowds and resource damage. Once appropriate numbers of visitors are determined through visitor use and social/science studies, the park will have more information to assist in parking management options.

Viewshed

Comment: Proposed construction of overlooks on the southeast shoreline of Jenny Lake will be visible from much of the lakeshore, as well as at least the northern trails around Jenny Lake (i.e., from areas within recommended wilderness). They will significantly alter the wilderness setting and visitor experience for Jenny Lake.

Response: Without proper overlooks and access to the water in the areas of optimum views of the lake and Teton Range, the east shoreline of Jenny Lake has seen serious resource degradation as visitors find their own way to the lakeshore. The NPS believes with proper design, overlooks are an effective way to prevent further degradation. In response to this comment, the NPS is analyzing additional design options that will accomplish the intended purpose of providing formalized overlooks, while scaling back on the sizes and design of the façade for less visual impacts from the west side of the lake.

Comment: The west boat dock is currently visible from Inspiration Point and other areas, and a larger dock will create more of an impact to the viewshed.

Response: Design alternatives are not finalized for the west boat dock, but consideration will be given to viewshed impact.

Telecommunications

Comment: The NPS needs to consider communications enhancements and improved wireless infrastructure in the proposed site improvements in the Jenny Lake Renewal Plan.

Response: This topic is out of the scope of this EA. The park is exploring improvements to telecommunications services for visitors and has completed a formal request for information from commercial entities to provide improved services in developed areas of the park. Future telecommunication options in the park will be considered as a separate planning process.

Accessibility

Comment: Recommend improvements in the area going to the beach, north of the boat dock, to make the area more accessible.

Response: It is a project goal to provide accessible facilities and services (trails) throughout South Jenny Lake. In addition, as stated in the EA, the park is analyzing the possibility for an overlook in the Rock Beach location that will have two separate access points, one of which will be accessible with a ramp to the beach and lake edge. The park is still in the process of determining its design and feasibility.

Comment: Park management should consider Jenny Lake Ranger George Montopoli's plan for a wheel chair accessible interpretive trail about the CCC camps on the south side of Jenny Lake.

Response: Park interpretative and cultural resources staff consulted this plan previously. The Interpretative Master Plan does incorporate CCC history into interpretative media. Because the proposed interpretative trail mentioned above will go through previously undisturbed areas and through a known archeological site, the NPS did not consider a trail in this area.

Comment: Suggest changing the stairs at the entrance of the Ranger Station to a ramp to make it ABAAS compliant.

Response: In order to comply with the Architectural Barriers Act (ABA), the NPS followed the Uniform Federal Accessibility Standards (UFAS), which states that a minimum of one accessible route and one accessible entrance must be provided (under section 4.1.6- Altered Buildings). The design of the Jenny Lake Visitor Center meets this requirement.

The NPS discussed improvements to the Jenny Lake Ranger Station to make it fully ABAAS compliant, but decided that it was not necessary to implement physical access improvements to the Ranger Station at this time. The purpose of the building is to issue backcountry permits to the public and provide backcountry information. This information could be provided with programmatic access (as opposed to physical access) by posting all available information on both the inside and outside; thereby providing a mechanism for communication for those who cannot access the building.

Safety

Comment: Stating trails would be "safe" in the EA should be reconsidered as people's safety cannot be guaranteed in the backcountry.

Response: The goals referenced in the comment were developed for the long-term management of the Jenny Lake area and are not specific to just the backcountry portion of this project. The NPS understands that there are risks inherent in many activities in the park but the

selected action will result in benefits to public safety and visitors' ability to manage their own risk in the backcountry. In addition to trail work, targeted safety information provided in the frontcountry could increase hikers' knowledge of potential risks associated with hiking the trails and strategies to manage those risks.

Comment: Commentor doubts that a larger dock for queuing will increase visitor safety.

Response: Design alternatives are not finalized for the west boat dock, but consideration will be given to safety concerns, as well as eliminating the potential for a queue line that could back up to the trail junction to the north (Jenny Lake Loop Trail and Boat Dock Spur Trail) potentially causing confusion and frustration to visitors. A portion of the fixed dock enlargement (approximately 100 square feet) will be provided to visitors who are unable to disembark the dock to the trail system.

Permits

Comment: This project may require permitting from several programs within the Wyoming Department of Environmental Quality.

Response: The park will submit all appropriate Clean Water Act permit requests and verifications for appropriate permits prior to construction activities.

Wilderness

Comment: The Wilderness boundary should be redrawn with the Hidden Falls area outside of the boundary.

Response: In the 1972 Grand Teton Wilderness Recommendation, the 200 acres between the original wilderness boundary line and the west shore of Jenny Lake, were not included in the preliminary wilderness proposal because of heavy visitor use to Hidden Falls and the lakeshore. Reexamination of the issue indicated that the area could be properly managed as wilderness and it was included in the recommended wilderness boundary. Park managers continue to believe that this is appropriate, with the understanding that there are various levels of wilderness and wilderness experiences available to visitors. For some visitors this may be the only wilderness they ever experience.

Route-finding

Comment: The main entrance to the Jenny Lake area is confusing and difficult to navigate.

Response: The selected action includes a number of features to address this condition. An Interpretive Plaza will be developed at South Jenny Lake to provide a primary Jenny Lake frontcountry and backcountry access point. Proposed work in the Interpretive Plaza will improve the visitor's sense of arrival by creating one primary gateway to the newly renovated visitor area. The overall concept for this area is to clearly welcome visitors to the Jenny Lake Visitor Center with a notable "front door." The entry is focused in the large area between the visitor center and the Jenny Lake Store, immediately adjacent to the expanded drop-off area. The drop-off area will be redesigned for entering vehicles to have direct sightlines to identifying signs and elements in the Interpretive Plaza. The vehicular drop-off will be clearly delineated and expanded to provide safe staging for large and small vehicles, as well as for the potential future increase of transit efforts. The drop-off, visitor plaza, and landscape features will all serve to establish a sense of arrival at Jenny Lake. Interpretive and directional information will be concentrated in this central area. In addition, the park will continue to explore alternative management strategies to improve the parking situation at Jenny Lake.

Comment: The trails in the South Jenny Lake developed area are poorly planned and inadequate, and route-finding is insufficient.

Response: The plan addresses these issues. Route-finding will be added and the proposed trail system will clearly orient visitors to Jenny Lake as well as other areas of interest with a series of overlooks and access points at the lake edge.

Comment: Visitor route-finding is poor at the north end of the Moose-Jenny Pathway. These poor route-finding and interpretive conditions should be addressed and added to the EA in a revised alternative B.

Response: The new pedestrian crossing and the redesign of the bike parking, as well as the new front entrance of the Interpretative Plaza, should reduce confusion for bicyclists arriving at the north end of the multiuse pathway. The park will reassess the need for additional signing after the bike parking is reconfigured and other Jenny Lake Renewal components are complete.

Education and Interpretation

Comment: The high number of visitors using the area has a negative impact on wildlife, and visitors are often uneducated about how to behave around wildlife.

Response: An Interpretive Master Plan has been developed for the Jenny Lake area that includes interpretation and education regarding the Jenny Lake area and the park's recommended wilderness, including human/wildlife safety information. Safety and other information will be included in interpretive displays added in the frontcountry.

Comment: The Jenny Lake area has important cultural and historic significance, yet opportunities for interpretation are limited. The park should provide interpretation about the creation of the park, the history of climbing, and the legacy of Native Americans, mountain men, and early explorers.

Response: All of these topic areas are part of the Interpretive Master Plan.

Infrastructure

Comment: There are water quality issues that need to be addressed, such as a lack of sanitation facilities on the west side of the lake near the boat dock.

Response: The EA addresses the potential need for more sanitation facilities. Monitoring will be undertaken to determine the need for additional restrooms for individuals heading to the trail system on the west side of Jenny Lake. Throughout the planning process, there has been thoughtful consideration regarding the large number of visitors to the west side of Jenny Lake and the resulting possible need for toilet facilities to accommodate them. The park has decided to begin an education program regarding the absence of bathroom facilities in the backcountry areas and the proper disposal of human waste in those areas so potential visitors are better informed and can plan ahead. Further study of the potential human waste problem in the backcountry of Jenny Lake will be followed by subsequent studies to determine the need for vault toilet facilities near the east boat dock. If future data from continued monitoring suggests that there are threats to the resource, the park will further consider the installation of vault toilets near the concessioner boat dock on the east side of the lake. If determined to be beneficial, ABAAS vault toilets (two unisex) will be located adjacent to the Gateway Plaza.

Comment: Infrastructure such as sewage and water systems are aging and in some cases, failing due to inadequate park funding. Any septic treatment solutions should be limited to using and improving leach fields in the Jenny Lake area.

Response: The Wyoming Department of Environmental Quality defines both wells and leach fields as forms of direct injection. The selected action includes replacement sewer lines, a septic tank, and a subsurface infiltration system to meet necessary capacity increase

requirements. The proposed infiltration system will meet Wyoming Department of Environmental Quality and Environmental Protection Agency requirements.

Bridges

Comment: Concerned about the addition of a new bridge above Hidden Falls.

Response: The proposed bridges in the Hidden Falls area are replacement bridges that will be constructed in place of existing bridges below the Hidden Falls viewing area.

Cultural Resources

Comment: Questions the accuracy of the EA at p. 17-18 with regards to Museum Collections. Concerned about prior movement of historic resources associated with the Crandall Studio. What mitigation occurred to reduce this Adverse Effect to a listed property? The EA should address Crandall Studio issues and mitigation. Need to ensure that funding requirements consider those required to manage cultural resources. Perhaps Museum Collections should not be a topic dismissed from further analysis.

Response: The Jenny Lake Visitor Center (aka Crandall Studio), which is a contributing building of the NRHP-listed Jenny Lake Ranger Station Historic District, will not be adversely affected by this project because none of the proposed improvements to the frontcountry will impact the characteristics of the property that qualify it for inclusion in the NRHP. The Jenny Lake Ranger Station and Crandall Studio were listed after they had been moved from their original locations, and therefore in 1991 when the park proposed relocation of the two structures, Wyoming SHPO concurred that the undertaking will have no adverse effect to cultural resources. Consequently, no mitigations were identified for the relocation of the structures.

There are only a few museum objects in the Jenny Lake Visitor Center and they will not be impacted by this project, therefore, it is appropriate that museum collections were dismissed from further analysis.

Comment: The Preferred Alternative must provide sufficient funding to mitigate all adverse effects to affected resources, including mitigation of cultural resources. Need to commit to archaeological monitoring of construction activities during initial soil disturbance activities by a qualified archaeologist.

Response: Archeological monitoring will occur in both the frontcountry and backcountry before and during construction activities. The extent and timing of the monitoring is being determined through a Programmatic Agreement.

Comment: Questions the depth of detail in the Mettler and Associates (2012) Existing Data Review for potentially affected cultural resources.

Response: The Wyoming SHPO concurred with the findings in the 2012 Cultural Resources Inventory.

Comment: Recommends a 2014 re-recording, re-evaluation, and reanalysis of all prehistoric cultural resources in the APE, as well as in the Cumulative Impact Analysis Area.

Response: The park is re-evaluating some of the prehistoric cultural resources that could be adversely affected by the Jenny Lake project. The reevaluation of sites will allow the park to determine the eligibility of the site in its entirety and better understand where/if there are large concentrations. The reevaluations will occur in the form of site surveys and testing during the summer of 2014.

Comment: Disagrees with the park de-emphasizing future cumulative impacts to cultural resources. NPS can't state that cumulative impacts would be negligible to minor, short term and adverse. Identified Adverse Effects are not minor, negligible or short term. No mitigation is provided, a flaw of this NEPA analysis.

Response: In the Cumulative Impacts of the Preferred Alternative section on page 96, the EA states, "impacts of this alternative, in combination with the adverse impacts on cultural resources from other past, present, and reasonably foreseeable future actions, will result in a moderate adverse cumulative impact. The effects of Alternative B will contribute moderately to the adverse cumulative impact on cultural resources." In addition to the mitigations listed in the EA (pg. 67-68), mitigations will be developed through the Programmatic Agreement.

Comment: Recommends a spring 2014 revisit of the project area by qualified specialist to identify culturally sensitive sediments where unexpected discoveries may be predicted, where past recordation efforts may be incomplete, and where current erosion and fire vegetation denuding (recognized to be of concern to the park may have already exposed previously unrecognized cultural resources. Sufficient funding needs to be provided to inventory, evaluate, and mitigate all cultural resources potentially adversely affected by the proposed action.

Response: As stated above, the park is re-evaluating prehistoric cultural resources that could be adversely impacted by the project. However, the park is not considering a complete re-survey of the entire project area.

Transit

Comment: The NPS should consider increased transit and shuttles to bring visitors to the area.

Response: The NPS understands that an increase in the use of alternative transportation such as a shuttle system can be beneficial in many visitor use areas. In 2009, Western Transportation Institute (Montana State University, College of Engineering, Bozeman, MT) completed the Grand Teton National Park Public Transit Business Plan. The study included: 1. Literature/data review and analysis; 2. Visitor and employee survey, stakeholder interviews, and collected data analysis; and 3. Design service alternatives and alternate funding strategies for a proposed transit system. Although the information from the surveys and interviews indicated the general desirability of a transit system, it did not indicate the necessity within the park at that time. Specifically, in the Jenny Lake area, without careful planning, increasing the numbers of visitors to the Jenny Lake frontcountry could have unintended consequences in the more fragile backcountry areas. The park is not precluding the idea of transit systems in the future, but implementing transit or shuttle programs will require thorough planning to assess the need, feasibility, and potential environmental impacts of such a program. Any increase in current visitation levels must be supported with future visitor use and resource studies.

Comment: The NPS should close the highway from Moose to the dam and institute a shuttle system.

Response: Not only is the Teton Park Road a primary route through the park to many other destinations in and out of the park, the Jenny Lake area has been one of the most popular destinations since the park's inception and the park is not considering closing the Teton Park Road to private vehicles.

Pathways

Comment: The EA needs to address the park's multiuse pathway system, specifically pathway connections and facilities within the developed area of South Jenny Lake.

Response: The 2006 Transportation Plan Environmental Impact Statement (EIS) and 2007 Record of Decision (ROD) analyzed the multiuse pathway from the town of Jackson to South Jenny Lake, where it currently terminates. From this terminus, the plan also analyzed connecting South Jenny Lake to North Jenny Lake, bypassing the South Jenny Lake developed area. Should funding become available and conditions remain unchanged since the 2007 ROD, the park has the authority to implement the section from South Jenny Lake to North Jenny Lake based on the previous environmental compliance.

The NPS does not want to encourage bicycling in the South Jenny Lake developed area. This is a visitor use area designed for high density pedestrian activity. It was the intent of the 2006 Transportation Plan EIS and its 2007 ROD (2006 EIS/2007 ROD), as well as this plan, for bicyclists to disembark their bikes at the north terminus of the multiuse pathway and leave them at the bike racks before entering the Interpretative Plaza.

Comment: The draft EA fails to include the relevant sections from the Transportation Plan for the Jenny Lake area. The Final EA decision should include an updated description of what has been approved, what is needed and new and in the EA, what will be built as part of the Jenny Renewal, and to also anticipate the future pathways that are already approved.

Response: See the above response. The text will be updated to reflect what has been completed to date in the Relationship to Other Plans section. See Text Changes section above for exact language.

Comment: Stripe and sign the one-way Jenny Lake Loop Road to facilitate two way bicycle traffic.

Response: The American Association of State Highway and Transportation Officials (AASHTO) does not recommend two-way bike traffic on a one-way road¹, therefore the NPS is not encouraging this. Currently, the bike lane is on the right side of the road for southbound traffic. Once the South Jenny Lake to North Jenny Lake segment is complete, bicyclists will be able to complete the one-way loop.

Comment: The best use of the one-way Jenny Lake Loop Road is as a non-motorized corridor.

Response: The park is not considering closing the one-way Jenny Lake Loop Road and the historic Jenny Lake Overlook to vehicle access.

Comment: The plan should address pathway improvements within the Jenny Lake developed area and a multiuse pathway to String Lake.

Response: Signing (route-finding) and additional bike parking will be included in the developed area at South Jenny Lake and at the north terminus of the multiuse pathway. The developed area is not intended for use by cyclists because of the high number of visitors on foot in this area. Rather, cyclists who want to travel on to North Jenny Lake will be encouraged to travel around the area on future pathway segments. Others who want to experience the Jenny Lake developed area will be encouraged to park their bikes in the provided bike racks and explore the area on foot as well.

¹ American Association of State Highway and Transportation Officials 444 north capitol street, NW Washington, DC 20001 www.aashto.org GBF-3 ISBN 1-56051-102-8 1999: Two-way bike lanes on one side of the roadway are not recommended when they result in bicycles riding against the flow of motor vehicle traffic. Wrong-way riding is a major cause of bicycle crashes and violates the rules of the road as stated in the UVC 3. On one-way streets, bike lanes should generally be placed on the right side of the street. Bike lanes on the left side are unfamiliar and unexpected for most motorists....

Comment: Biking would reduce impacts to natural soundscapes compared to motor vehicles. Visitor experience and natural soundscapes are analyzed in the EA, demonstrating the need to better consider bicycling pathways in the Final EA.

Response: Multiuse pathways were not addressed in this EA. As stated in a previous response above, the 2006 EIS/2007 ROD analyzed the multiuse pathway from the town of Jackson to North Jenny Lake. As this comment pertains to natural soundscapes, there is no available data to support that the multiuse pathways that have been constructed in Grand Teton National Park since the 2006 EIS/2007 ROD have decreased the number of vehicles in the park or in the Jenny Lake area.

Comment: Bicycling and walking align with the NPS' Second-Century Vision.

Response: Existing multiuse pathways, as well as those planned for possible future construction, meet the intent of the Second-Century Vision themes identified in the comment.

Comment: NPS Management Policies 2006, Section 9.2, states: "Depending on a park unit's size, location, resources, and level of use, the Service will, where appropriate, emphasize and encourage alternative transportation systems, which may include a mix of buses, trains, ferries, trams, and-preferably nonmotorized modes of access to and moving within parks. In general, the preferred modes of transportation will be those that contribute to maximum visitor enjoyment of, and minimum adverse impacts on, park resources and values." Thus existing National Park Policy adds to the list of reasons to include pathway connections in the Final EA.

Response: Existing multiuse pathways, as well as those planned for possible future construction, meet the intent of the policies identified in the comment, which state that alternative transportation systems will be encouraged "where appropriate." The NPS has determined that bicycle use within the Jenny Lake developed area is not appropriate because of the high number of pedestrians. The plan for future pathway development is to provide a route around the Jenny Lake visitor use area, to the North Jenny Lake Junction. Cyclists wishing to visit the developed area can park their bikes at the end of the existing pathway and explore the area on foot.

Comment: The EA fails to describe the poor conditions that bicycle visitors face in the Jenny Lake area. The existing conditions for bicyclists should be added to the Final EA along with recommendations for improved facilities for bicycle visitors.

Response: As stated in a previous response above, the NPS does not want to encourage bicycle traffic in the South Jenny Lake developed area as this was designed for pedestrians. The 2006 EIS/2007 ROD addresses the multiuse pathways between South Jenny Lake and North Jenny Lake.

Comment: The Jenny Lake Shoreline Road should be developed as a pathway to connect the west edge of the Jenny Lake Campground to the South Jenny Lake developed area.

Response: The road identified in this comment that parallels the Jenny Lake Campground, the Jenny Lake Shoreline Road, is part of the Jenny Lake Campground Historic District. Although the park understands this road is used as a connection from the one-way Jenny Lake Loop Road to South Jenny Lake, it was not intended to be a part of the park's multiuse pathway system and was not considered for multiuse pathway improvements in the 2006 EIS/2007 ROD. Improvements could potentially cause an adverse effect within the Jenny Lake Campground Historic District, specifically the historic character of this contributing feature.

Comment: A revised Alternative B should address bicycling and pathway needs. While the draft Alternative B will better serve the Jenny Lake area with improved access for hikers, pedestrians, and visitors using motor vehicles, minor additions still need to be included in the

Final EA and Decision on the Jenny Lake Renewal Plan to better address the needs of bicyclists and people with disabilities that desire pathway wheelchair access. Planning needs to consider pathway access to the visitor services area and the lake. All the pathways identified within the Jenny Lake developed area need to be included within the scope of facility upgrades planned.

Response: One of the primary goals of the Jenny Lake Renewal Project is to provide accessible facilities and services at South Jenny Lake. The selected action includes upgrading the existing restroom in the South Jenny Lake to be ABAAS compliant and adding an additional ABAAS compliant restroom. The plaza, bridge, and boat dock access will all be ABAAS compliant, as will all the trails in the Interpretative Plaza leading to the boat dock and lake overlooks. As stated above, in the South Jenny Lake portion of the project area, as well as the backcountry trails, bicycle use is either prohibited or not encouraged. The 2006 EIS/2007 ROD analyzed the connection of multiuse pathways between North and South Jenny Lake.

Comment: The Jenny Lake Renewal design plans need to anticipate the future pathway system expansion around the Jenny Lake scenic loop.

Response: The multiuse pathway segment from South Jenny Lake to North Jenny Lake was analyzed in the 2006 EIS/2007 ROD. Should funding become available and conditions remain unchanged since the 2007 ROD, the park has the authority to implement the section from South Jenny Lake to North Jenny Lake based on the previous compliance.

Comment: The park should include a bike pathway from the campground in both directions – one from the campground to the South Jenny Lake developed area and one heading north to String Lake. Additional bicycle parking should also be added.

Response: As stated above, the EIS/ROD analyzed a multiuse pathway from the town of Jackson to South Jenny Lake, where it currently terminates. From this terminus, the plan also analyzed connecting South Jenny Lake to North Jenny Lake, bypassing the South Jenny Lake developed area, continuing north to North Jenny Lake. Should funding become available and conditions remain unchanged since the 2007 ROD, the park has the authority to implement the section from South Jenny Lake to North Jenny Lake based on the previous compliance.

The trail from the campground to the Interpretative Plaza was originally the historic Southern Campground Loop Road and is within the Jenny Lake Campground Historic District. It is currently a gravel trail for pedestrian use. Any improvements to this trail could potentially cause an adverse effect within the Jenny Lake Campground Historic District, specifically the historic character of this contributing feature. In the design process, the NPS will determine whether additional bike parking near the campground is warranted.

Comment: A future Jenny Lake Loop pathway to bypass the South Jenny Lake developed area is needed and should be included in the EA. This would provide through-travelers on the multiuse pathway system a means to get around the busy developed area parking and plaza area, improving their experience and minimizing congestion in the plaza area. The future pathway to North Jenny Lake along the Teton Park Road should be included in the EA.

Response: When the park has funding available to start planning the implementation of the multiuse pathway from South Jenny Lake to North Jenny Lake, project managers, landscape architects, and Western Lands Federal Highway Division will look at the best design options to provide safe visitor travel and connectivity, while reducing the adverse impacts to resources. A value analysis will determine the final design to be implemented.

Comment: The EA does not address problems with pathways for cyclists in the South Jenny Lake developed area. Route-finding for cyclists in this area is confusing at best and dangerous

at worst. The overall master plan should integrate the eventual pathway into the other elements of that plan and should plan for a route through the congested area. The pathway should be separate from the pedestrian areas near the store/restrooms for those choosing not to stop.

Response: The multiuse pathway is separate from the pedestrian paths in the Jenny Lake developed area. Signs will be added to the existing multiuse pathway to direct users to the Jenny Lake Interpretative Area, as well as future multiuse pathway segments. As stated previously, the intent is not for cyclists to ride through the Jenny Lake developed area. Bike racks are located at the terminus so cyclists can park their bikes and explore the area on foot. In the design process, the NPS will determine whether additional bike parking near the campground is warranted.

Comment: Because of the high levels of use, the replacement trail for the currently closed lakeside trail may need to be a paved trail.

Response: The park is unclear as to which closed lakeside trail the commentor is referring. The Jenny Lake Overlook trail is the only trail that is currently closed due to visitor safety concerns. The Jenny Lake Renewal Project addresses rehabilitation of this trail.

Comment: Extending bicycle trails in the Jenny Lake area may help with over crowding of the Jenny Lake and String Lake parking lots if people can be encouraged to park at Moose and bike to the Jenny lake area.

Response: The NPS will research this further to see if there is public information that can be provided to multiuse pathway users regarding alternate parking locations.

Comment: More bike paths are not needed in the park. Cyclists can park their bikes along with the motorists and walk or hike. There are lots of other places to bike.

Response: As stated above, this project does not analyze additional multiuse pathways in the Jenny Lake area.

Non-Impairment Finding

NPS Management Policies 2006 require analysis of potential effects to determine whether or not actions will impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within the park, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment. An impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

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

The park resources and values that are subject to the no-impairment standard include:

- The park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- Appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- Any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's

threshold for considering whether there could be an impairment is based on whether an action will have significant effects.

Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources and values, and these impact areas are not generally considered park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. Fundamental resources and values for the park are identified in the Foundation for Planning and Management for Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway. According to that document, of the impact topics carried forward in this EA, the park resources and value that are subject to the no-impairment standard include cultural resources, natural resources (vegetation and wildlife), wilderness, and natural soundscapes.

- **Cultural Resources.** Construction activities in the frontcountry will temporarily introduce non-historic visual, audible, and atmospheric elements into cultural resource settings. Such intrusions will be short-term, negligible or minor, and adverse. Long-term adverse effects will result because of the potential to impact known archeological resources. Construction activities in the backcountry will temporarily introduce non-historic visual, audible, and atmospheric elements into cultural resource settings. Such intrusions will be short-term, negligible or minor, and adverse, with the exceptions of the bridge replacement over Cascade Creek, the rerouting of Confusion Junction, and the work to repair the large gullies on the way to Inspiration Point. There will be no adverse effect to the historic trail because the project entails only routine maintenance and trail rerouting. Effects will be short-term, negligible to minor, and adverse. After applying the criteria of the ACHP for adverse effects (36 CFR section 800.5, Assessment of Adverse Effects), the NPS concludes that implementation of the selected action will have an adverse effect on the cultural resources in and near Grand Teton National Park that are listed, or eligible for listing, in the NRHP. Construction activities related to improvements to trail circulation, the Boat House Overlook, water and wastewater systems, Cottonwood Creek Beach, and the String Lake Outlet area will result in long-term, moderate, adverse effects and will constitute an adverse effect under section 106. As a result, a Programmatic Agreement will be entered into with SHPO and consulting parties, tribes, and the ACHP to mitigate these adverse effects. The selected action will result in moderate adverse impacts to cultural resources; therefore, there will be no impairment to cultural resources.

- **Natural Resources (Vegetation and Wildlife).** The selected action will not result in an impairment of vegetation because construction-related adverse effects will be localized and minor. A number of mitigation measures will be implemented to protect these resources, minimize the potential for weed establishment, and ensure restoration of disturbed areas.

Noise and construction disturbance will temporarily impact wildlife in the area. The selected action has the potential to affect pika and peregrine falcon. Mitigation measures will be implemented to restrict timing and location of construction activities near habitat for these two species if they are present. The selected action will not result in an impairment of wildlife because most of the construction impacts will be short-term and minor and resource protection and conservation mitigations will be implemented to reduce impacts.

- **Wilderness.** The selected action will not result in an impairment of wilderness because all construction-related adverse effects will be moderate or less. Impacts on the undeveloped quality of the wilderness and on opportunities for solitude and primitive and unconfined recreation within the project area will be long-term, moderate, and adverse. All other impacts will be minor or less. Therefore, there will be no impairment to wilderness resources.

- **Natural Soundscapes.** Impacts to natural sounds from implementation of the selected action will result from noise associated with the construction/ rehabilitation of facilities, infrastructure, and trails. There will be no long-term changes to the natural soundscape after construction. Construction noise, particularly from helicopter activity, will degrade the natural soundscape in the affected areas and the noise could affect nearby recreational users on trails, overlooks, trailheads, and other areas. The selected action will not result in an impairment of natural soundscapes because the construction impacts will be short-term, minor to moderate, and localized. Mitigation measures will be implemented to reduce impacts.

Summary

Although the project has some adverse impacts, in all cases these adverse impacts are the result of actions taken to preserve and restore other park resources and values. Overall, the plan results in benefits to park resources and values, opportunities for their enjoyment, and it does not result in their impairment. In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected action.

Appendix A:

Mitigation Measures Associated with Alternative B

Congress charged the NPS with managing the lands under its stewardship “in such manner and by such means as would leave them unimpaired for the enjoyment of future generations” (NPS Organic Act, 16 U.S.C. 1). As a result, NPS staff routinely evaluates and implements mitigation measures whenever conditions occur that could adversely affect the sustainability of national park resources.

Mitigation is defined in the Code of Federal Regulations (40 CFR 1508.20) as:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

The following mitigation measures were developed to minimize the degree and/or severity of adverse effects and will be implemented under the action alternative, as needed. The NPS may need to obtain federal and state environmental permits and, as part of that process, additional mitigation measures could be required by other agencies. The NPS commits to the mitigation measures identified in this section as a part of implementing the project. The impacts for the action alternative in Chapter 3 of the EA were determined with these mitigation measures in place, with tailoring to meet site-specific conditions.

General Construction Best Management Practices

Construction best management practices (BMPs) will be implemented, as appropriate, before, during, and/or after construction of the proposed improvements. BMPs specific to the design cannot be proposed until the full design is complete and specifics of the proposed construction are known. The construction practices listed below are subject to change and addition during construction to mitigate impacts to resources.

- All tools, equipment, temporary barricades and signs, surplus materials, and trash will be removed upon project completion. Any asphalt surfaces damaged due to project work will be repaired to original condition. All demolition debris (e.g., old water lines, appurtenances, water tanks, valves, packaging materials, trash) will be disposed of at appropriate areas designated by the park. When possible, debris will be disposed of at a materials recycling facility.
- To minimize unintentional introductions of non-native plants, all construction equipment and vehicles entering the park will be cleaned before entering park lands and certified as free of plant propagules and exotic soils by appropriate park staff.
- Construction zones will be identified and fenced with construction tape, snow fencing, or some similar material prior to any construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the defined construction zone.

- To minimize the amount of ground disturbance, staging and stockpiling areas will be in previously disturbed sites, away from visitor use areas to the extent possible. All staging and stockpiling areas will be returned to pre-construction conditions following work. Parking areas for construction vehicles will be limited to staging areas, existing roads, and previously disturbed areas.
- Revegetation and recontouring of disturbed areas will take place following construction and will be designed to minimize the visual intrusion of the disturbance. Revegetation efforts will strive to restore the natural spacing, abundance, and diversity of native plant communities. All disturbed areas will be restored as nearly as possible to pre-construction conditions shortly after construction activities are completed. Vegetation disturbance will be prevented to the extent possible. Weed control methods will be implemented to minimize the introduction of noxious weeds.
- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as silt fences and/or sand bags will be used to minimize any potential soil erosion. A Stormwater Pollution Prevention Plan will be developed in accordance with Wyoming State law
- A hazardous spill plan will be in place, stating what actions will be taken in the case of a spill, notification measures, and preventive measures to be implemented, such as the placement of refueling facilities, storage, and handling of hazardous materials, etc. Any spills of hazardous materials will be immediately reported to the park safety officer.
- Where appropriate and available, “environmentally friendly” grease, hydraulic oil, and bar and chain oil will be used. These lubricants are vegetable- or mineral-oil based, and biodegradable.
- Power wash equipment and/or vehicles before and after use to prevent the introduction and transportation of exotic plants.
- Dust abatement measures will be employed to reduce fugitive dust (including setting speed limits for construction vehicles in unpaved areas). Dirt and debris to be hauled away in trucks will be covered. Dust generated by construction will be controlled by spraying water on the construction site, and/or applying other approved chemicals or compounds to reduce dust, if necessary.
- To minimize air and sound pollution associated with construction activities, limit warm up, cool down, and idling of construction equipment to the minimum durations recommended in the equipment owner's manual, taking into consideration ambient temperatures and other factors.

Cultural Resources

- NPS will ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging paleontological materials, archeological sites, or historic properties. Contractors and subcontractors will also be instructed on procedures to follow in case previously unknown paleontological or archeological resources are uncovered during construction.
- Actions proposed in Alternative B will adversely affect historic structures, cultural landscapes, and archeological sites within the Jenny Lake area (an adverse effect is found when an action may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that will diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association). Prior to implementing the action alternative, an appropriate mitigation strategy

will be developed in consultation with the Wyoming State Historic Preservation Office (SHPO) and, if necessary, the Advisory Council on Historic Preservation (ACHP). Mitigation agreed upon will be outlined in a memorandum of agreement negotiated among the NPS, SHPO, and ACHP, and consulting parties as necessary. Any mitigative documentation will be prepared in accordance with section 110 (b) of the NHPA, and the documentation submitted to the Historic American Buildings Survey / Historic American Engineering Record / Historic American Landscape Survey program.

- Continue coordination with a NPS archeologist before any ground disturbing activities.
- In the event that archeological resources are discovered during construction, all work in the immediate vicinity of the discovery will be halted until the resources could be identified and documented and, if the resources cannot be preserved in situ, an appropriate mitigation strategy will be developed in consultation with the SHPO and, as necessary, American Indian tribes.
- In the event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 will be followed. If non-Indian human remains were discovered, standard reporting procedures to the proper authorities will be followed, as will all applicable federal, state, and local laws.
- The trails supervisor must ensure that routine maintenance undertakings have no adverse effects to cultural resources. For work in or near historic districts, trails, or structures, consultation with the park cultural resources specialist and an Assessment of Effect may be required.

Natural Resources

Vegetation

Revegetation of disturbed areas will follow NPS policies as stated in NPS Management Policies 2006 (NPS 2006c). These policies state that soil shall be conserved and structure and fertility restored, locally occurring native plant materials shall be used in restoration and revegetation treatments, and disturbance shall be minimized such that ecological integrity is maintained or restored. Specific soil and vegetation treatments will be detailed in a revegetation plan and in construction and implementation documents.

- Soil treatments will be tailored to each disturbance area. In trail reclamation areas, soil will be decompacted to a depth that will accommodate average rooting depth of common native plant species. In areas denuded of topsoil, appropriate soil will be imported and if necessary soil supplements will be imported as well.
- All disturbed areas will be revegetated with native plant materials. Native plant materials used in restoration will be those that are locally occurring and will be reintroduced such that the natural spacing, abundance, and diversity of plant species will be re-established.
- Work limits, travel paths, and staging areas will be designated and enforced to mitigate impacts to vegetation. Disturbance zones and construction and staging areas will be fenced or clearly marked to prevent impacts to resources outside the approved construction limits.
- In previously undisturbed areas where ground disturbance will occur, the Science and Resource Management Division will be contacted prior to work start to survey for and treat non-native plant species before any ground disturbance occurs outside existing or previously disturbed areas. Designers will provide information to the Science and Resource Management Division one growing season before planned disturbance if the affected area

is <1/4 acre and one or two growing seasons if >1/4 acre, to allow time to obtain enough plant material for revegetation efforts.

- Staging areas and project work areas will be surveyed for invasive non-native plants one to three years after project completion. Any trenching operations (e.g., installing and accessing water lines, replacing water storage tanks and vaults) will be located to minimize disturbance to established vegetation and avoid large diameter trees to the extent possible. Equipment will be used that allows the operator to detect the presence of tree roots prior to damaging them. Roots less than 4 inches in diameter will be given a clean straight cut to prevent root rot. When roots 4 inches in diameter and larger are encountered during trenching operations, they will be retained by hand-digging the trench beneath the root. As the trench is dug, the excavated material will be stored adjacent to disturbed areas. After trenching is complete, bedding will be placed and compacted in the bottom of the trench and the pipe installed in the bedding. Backfilling and compaction will begin immediately after the pipe is placed into the trench, and the trench surface will be returned to preconstruction contours.
- All trenching restoration operations will follow guidelines approved by park staff. These guidelines will minimize disturbance to soils and vegetation from construction activities, and will restore affected areas to their original form wherever possible. Further, once construction is completed and disturbed surfaces recontoured, erosion mats or other erosion control measures will be used to protect bare, exposed soils from erosion until revegetation takes place.
- Sources of rock, sand, gravel, earth, soil, or other imported natural material will be inspected for invasive non-native plants prior to acceptance. Materials may be rejected if non-native invasive plants are present at the source and seeds could be present in the material.
- All equipment, including hand tools, must be washed before use in the park. This is to ensure that all soil and potential exotic plant propagules are removed. Existing native vegetation will be salvaged and preserved to the extent possible for use in revegetating disturbed areas. Existing trees will be preserved to the extent possible. Pre- and post-project plant monitoring will be conducted in the project area to ensure successful revegetation, maintain plantings, and replace plants that do not survive. Invasive weed control measures will be implemented.
- Construction workers and supervisors will be provided with tree pruning guidelines to minimize damage to trees during project implementation.
- Horse and mule stock must be fed certified weed-free feed 24 hours prior to spending the night in the backcountry and while in the backcountry.
- Specific sites with known special status plant species present will be avoided.

Soils

- To minimize soil erosion at the project site, erosion control BMPs – including protection measures such as sediment traps, silt fences, erosion check screens / filters, jute mesh, and hydro mulch – will be used if necessary to prevent the loss of soil.
- Compacted soils will be scarified or de-compacted to a depth equal to the average rooting depth of dominant plants in adjacent plant communities and original contours re-established.

- Excavated or salvaged soil may be re-used within the project area. Topsoil materials will be stockpiled in a predetermined designated area away from excavations and future work sites and care will be taken to ensure that topsoil and subsoil or fill material are not mixed and are stockpiled in separate areas. Stockpiles will then be graded and shaped to allow unimpeded surface water drainage. Topsoil stockpiles will be no greater than 3 feet in height. Stockpiles will be temporarily seeded and periodically treated to prevent wind from scattering topsoil and to prevent the introduction of non-native plants. Live vegetation less than 3 feet in height and limbs less than 2 inches in diameter may be present in stockpiled topsoil. The soil to vegetation ratio shall not exceed a 10 to 1 ratio.
- Any fill materials will be obtained from a park-approved source approved by the Science and Resource Management Division. Borrow and aggregate materials from sources outside the park will be inspected to avoid importation of non-native plants.
- The contractors will control dust during construction by minimizing soil exposure, water spraying, and use of other dust prevention methods.
- If construction is not completed prior to a winter season, all disturbed areas and soil stockpiles will be protected from snowmelt impacts by using erosion-control BMPs and covering dirt piles with impermeable materials.
- Trails will be closed to stock use during periods of wet weather or due to other resource concerns.

Wildlife and Special Status Species

- In accordance with the Endangered Species Act (ESA), Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) will be completed prior to implementation of actions proposed in this EA. The park will implement all resulting mitigations.
- Potential rock harvesting sites will be surveyed by Science and Resource Management staff to assist in pika habitat avoidance.
- Under the Migratory Bird Treaty Act, no migratory bird, nest, or egg will be disturbed, removed, or destroyed. To minimize the potential for “taking” a nest of any protected bird species, park resource managers will survey the area before tree removal and/or ground disturbing activities commence to mitigate any potential issues in advance of site construction. To comply with the Migratory Bird Treaty Act, projects requiring vegetation removal between May 1 and August 1, or those requiring removal of large trees between March 1 and August 15, must be surveyed for nesting birds. Any active bird nests located during surveys must be protected until nestlings fledge or the nest fails. Park biologists will monitor such nests and provide updates to the project leader on nesting status. Work must take place within two weeks of survey; otherwise another survey must be done.
- Appropriate measures will be taken to reduce the potential for bear-human conflicts. All project activities must comply with the Grand Teton National Park Bear Management Plan guidelines for use and storage of food, fuels, and other bear attractants. All contractors and employees will be trained and required to comply with the park’s bear management and food storage regulations during construction and rehabilitation activities. All project staff, trainees, and other personnel will be briefed about food storage needs and bear safety protocols. Bear-proof garbage containers will be required. Food, fuel, and other attractants will be stored and handled to minimize potential conflicts (i.e., no food, garbage, drink, trash, or food and drink containers will be placed outside vehicles, trailers, or bear resistant containers except during times when they are being used). All bear-human confrontations and sightings will be promptly reported to resource management staff.

Water Resources

- To the extent possible, construction activities will be conducted during periods of low precipitation to reduce the risk of accidental hydrocarbon leaks or spills reaching surface and/or groundwater.
- Equipment will be inspected for fluid leaks, including hydraulic fluid and oil, prior to use on construction sites, and inspection schedules will be implemented to prevent contamination of soil and water.
- Stormwater treatment will be incorporated as part of the construction plans to provide engineering methods and techniques specific to the finalized design drawings, which will minimize soil erosion and degradation in the project area during both construction and use of the area. Site work in the frontcountry will incorporate stormwater pollution prevention into the plan using BMPs. If construction requires a National Pollutant Discharge Elimination System permit for stormwater discharges, then a Stormwater Pollution Prevention Plan will be prepared.
- Fabric barriers, straw bales, sandbags, block and gravel protection, etc., may be employed to create barriers. These barriers could be used in combination with other measures such as impoundments or sediment traps.
- Fueling and fuel storage areas will be bermed and lined to contain spills. Provisions will be made for the containment and disposal of oil soaked or contaminated soils (clay or plastic liners). Construction equipment will be regularly inspected and maintained to prevent any fluid leaks. Contractors will promptly clean up any leakage or accidental spills from construction equipment, such as hydraulic fluid, oil, fuel, or antifreeze.
- When construction is ended prior to a winter season, all disturbed areas and soil stockpiles will be protected from snowmelt impacts.
- Any activity that has the potential to alter stream flow characteristics or affect a watershed, wetland, or floodplain, must be submitted to the NPS for review.

Wilderness

- Natural materials will be used to repair or construct wilderness installations (e.g., water bars) or restore impacted areas to original condition.
- Minimize use of motorized and mechanized equipment by using hand and traditional tools as much as possible. The use of motorized equipment or mechanical means of transport will be minimized as outlined in the minimum requirement analysis.
- Follow vegetation, soil, and wildlife mitigations listed above.
- Eliminate installations designed solely for visitor comfort (seating benches and boulders).
- Minimize bulk and stature of bridge components, especially railings and deck width, to what is required for safety.
- Minimize tread and trail width to narrowest allowable.
- Confine lining or bordering trails with stones or other installations to those areas where no other means to delineate trail is possible.
- Minimize bulk and extent of fencing. Attempt to conceal fencing or other structures designed to limit access.

- Minimize use of motorized equipment and other noise making equipment. Use only motors equipped with functioning mufflers. Radio or other loudspeaker broadcasts is prohibited. Choose low noise equipment when possible. Minimize chainsaw use by precutting and prefabricating at frontcountry locations.
- Minimize signs that restrict or prohibit choices.

Natural Soundscapes

- Minimize use of motorized equipment and other noise making equipment.
- Only motors equipped with functioning mufflers will be used.
- Radio or other loudspeaker broadcasts is prohibited.
- Use of broadband or directional backup alarms is recommended.
- Use of backup alarms on motorized equipment in wilderness is prohibited. Use attendant spotter instead.
- Choose low noise equipment when possible.
- Minimize chainsaw use in backcountry by precutting and prefabricating at frontcountry locations.

Visitor Use and Experience

- During project implementation, visitors will be informed of construction activities via press releases, visitor center postings, and educational contacts. The park will provide information to visitors, concessioners, and employees of alternative routes and project schedule, including visitors and employees about opportunities in the adjacent Caribou-Targhee and Bridger-Teton National Forests.
- Temporary cautionary closure signs will be used on trails, roads, and facilities to protect visitors.
- The number, area, and duration of closures in the backcountry will be limited in order to maintain opportunities for solitude and primitive, unconfined recreation.
- Proposed actions that have the potential to impact visitor safety, access, or experience will be coordinated with the Interpretation and Ranger Divisions prior to work start. Dispatch will also be notified prior to work start.
- One lane of traffic will remain open during the installation of a new water line within South Jenny Lake. When delays are necessary, traffic will be released through the construction zone on the hour.

