

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

**Yellowstone National Park  
Wyoming, Montana, Idaho**



## **LAMAR RIVER BRIDGE FINDING OF NO SIGNIFICANT IMPACT**

The Lamar River Bridge is located on the Northeast Entrance Road within Yellowstone National Park. Construction to replace this bridge is anticipated to begin in the fall of 2010 and continue through 2011. The Northeast Entrance Road connects Mammoth Hot Springs, Tower Roosevelt, Lamar, and the Northeast Entrance and provides access to other areas of the Park. The Lamar River Bridge is located about five miles east of Tower Junction and about 24 miles west of the Northeast Entrance. The current bridge was constructed in 1939 and is 70 years old. A recent engineering study found the bridge is nearing the end of its service life. An environmental assessment (EA) was prepared in 2009 that analyzed two alternatives for the replacement of the bridge. The preferred alternative was selected after a careful review of resource and visitor impacts and public comment. Concerns identified during scoping and evaluated in the EA included access, turnouts, resource impacts, and safety.

This document records 1) a Finding of No Significant Impact as required by the National Environmental Policy Act of 1969 and 2) a determination of no impairment as required by the NPS Organic Act of 1916.

### **PREFERRED ALTERNATIVE**

The preferred alternative, described as Alternative C in the EA is the selected action. This action will permit the construction of a new bridge just upstream and adjacent to the existing bridge. The existing bridge will remain in use during construction of a new bridge. At completion of this new bridge, the existing bridge will be demolished and removed. The area of impact from the existing bridge and construction will then be rehabilitated to as near natural conditions as feasibly possible.

### **MITIGATING MEASURES**

The following measures were developed to minimize the degree and/or severity of adverse effects, and will be implemented during construction of the selected action:

- The new bridge will be designed using characteristics to resemble the existing historic bridge.
- Because removal of the existing bridge has been determined to be an adverse effect under the National Historic Preservation Act, park staff will develop content for a Wyoming Travel and Tourism Internet website that would discuss the historic nature and design of existing and past bridges within Yellowstone National Park.
- No permanent rip-rap will be placed in or along the Lamar River as part of this project.

- To the extent practicable, in order to minimize the amount of ground disturbance, staging and stockpiling areas will be located in previously disturbed sites, away from visitor use areas. All staging and stockpiling areas will be returned to pre-construction conditions following construction.
- Topsoil conservation measures will be employed prior to construction, to enhance revegetation efforts at the end of the construction phase.
- 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 would be instructed to avoid conducting activities beyond the construction zone as defined by the construction zone fencing.
- Revegetation and recontouring of disturbed areas will take place following construction, and will be designed to minimize the visual intrusion of the structure. Revegetation efforts will strive to reconstruct the natural spacing, abundance, and diversity of native plant species using native species. All disturbed areas will be restored as nearly as possible to pre-construction conditions shortly after construction activities are completed. Weed control methods will be implemented to minimize the introduction of noxious weeds. This project will follow Topsoil Retention/Vegetation Guidelines developed for previous projects within the park.
- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as the use of silt fences will be used to minimize any potential soil erosion.
- Dust generated by construction will be controlled by spraying water on the construction site, if necessary. Any water used for dust control will be taken from the Lamar River at the jobsite. Any equipment used will be cleaned using NPS protocols for reducing the spread of any exotic or problem species.
- To reduce noise and emissions, construction equipment will not be permitted to idle for long periods of time.
- To minimize possible petrochemical leaks from construction equipment, the contractor will regularly monitor and check construction equipment to identify and repair any leaks. Fueling and fuel storage will take place away from the river.
- Construction workers and supervisors will be informed about special status species. Contract provisions will require the cessation of construction activities if a special status species were discovered inhabiting the project area, until park staff re-evaluates the project. This would allow modification of the contract for any protection measures determined necessary to protect the discovery.
- Should construction unearth previously undiscovered cultural resources, work would be stopped in the area of any discovery and the park would consult with the state historic preservation officer and the Advisory Council on Historic Preservation, as necessary, according to §36 CFR 800.13, Post-review Discoveries. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) would be followed.
- The National Park Service 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.

- To minimize the potential for impacts to park visitors, variations on construction timing may be considered. One option includes optimizing work conducted in the shoulder seasons (Spring and Fall). Another option may include implementation of daily construction activity curfews such as not operating construction equipment on busy holiday weekends. The National Park Service will determine this in consultation with the Western Federal Lands Highway Division (WFLHD).
- Construction workers and supervisors will be informed about the special sensitivity of the park's values, regulations, and appropriate housekeeping (keeping areas clean of food scraps and trash that could attract bears or other wildlife).
- According to NPS Management Policies 2006, the National Park Service will strive to construct facilities with sustainable designs and systems to minimize potential environmental impacts. Development will not compete with or dominate the park's features, or interfere with natural processes, such as the seasonal migration of wildlife, hydrologic activity associated with wetlands, or hydrothermal processes. To the extent possible, the design and management of facilities would emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The National Park Service also reduces energy costs, eliminates waste, and conserves energy resources by using energy-efficient and cost-effective technology.

## **ALTERNATIVES CONSIDERED**

Alternatives considered included "No Action" (Alternative A in the EA); no substantial improvements would be performed other than in accordance with routine maintenance operations. The Lamar River Bridge would continue to deteriorate and experience reduced load capacity. At a point in the future, the bridge would need to be closed and visitors, park staff, and residents of Cooke City and Silvergate would not be able to access many areas served by the Northeast Entrance Road within Yellowstone National Park. This no-action alternative assumes that the NPS would not make major changes to current management.

An additional alternative considered was to completely remove the existing bridge and provide an entirely new structure located on the same horizontal alignment as the existing bridge (Alternative B in the EA). Because traffic would be maintained during construction, an on-site detour with a temporary bridge would be required. This alternative would require approximately 400 linear feet of approach roadway work both east and west of the existing bridge.

No new information came forward from public scoping or consultation with other agencies to necessitate the development of any new alternatives, other than those described and evaluated in this document.

### **Identification of the Environmentally Preferred Alternative**

The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed by §101 of the National Environmental Policy Act. This includes alternatives that:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A, *No Action*, would not meet the second and third evaluation factors above, as it would not address the inherent safety concerns of the aging structure. Seismic concerns and the deteriorating bridge deck would not be addressed. This alternative would not improve Lamar River scour concerns at the base of the bridge piers. This alternative does not proactively allow the NPS to maintain into the future, a river crossing for park visitors and neighboring residents.

Alternative B, *Replace Existing Bridge along Existing Alignment*, is the environmentally preferred alternative because it does address the six evaluation factors with the least amount of ground disturbance. Alternative B, would keep the new piers much closer to their existing locations, and require less permanent disturbance outside the existing roadway (i.e. less new road alignment would be necessary). The temporary bridge and approaches, though, would require temporary ground disturbance outside the existing roadway. The temporary bridge would also require additional piers in the water for the duration of the construction, and additional impacts from its construction. The additional step of building the temporary bridge would increase construction time and therefore impact visitors for a longer period of time.

Alternative C, *Replace Existing Bridge along New Alignment*, was selected as the preferred alternative over the environmentally preferred alternative. Alternative C would create a temporary increase in the amount of disturbed area within the park because of the approximately 4,000 feet of new road alignment that would be required. The rehabilitation of the old roadbed, though, would serve as mitigation for this temporary impact. While the bridge piers for the new bridge would cause slightly different hydraulic changes to the river bottom than the existing piers, the pier locations are within the same reach, therefore minimizing impacts.

While Alternative C has a slightly higher area of impact than Alternative B, it requires significantly less expenditure of public funds and is also less impacting to visitor experience. There would be less impact to park visitors because the existing bridge will be used during construction versus a temporary bridge that will create slower traffic movement and delays. After consideration of public comments throughout the scoping and planning process, careful review of potential resource and visitor impacts, and developing appropriate mitigation to protect resources, the preferred alternative best strikes a balance between visitor use needs (including health and safety) and protection of the environment.

## **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.***

The preferred alternative will include ground disturbance and the placement of fill material along the roadway to construct the new bridge on a new alignment. These activities will have a long-term minor to moderate adverse impact on water resources, floodplains and hydrology. The adverse impact resulting from the removal of the existing bridge would be mitigated by constructing the new bridge using design characteristics to resemble the existing historic bridge, and by development of content for a Wyoming Travel and Tourism Internet website that would discuss the historic nature and design of existing and past bridges within Yellowstone National Park. Long-term beneficial impacts would occur for health and human safety, park operations, and socio-economics of the region.

### ***Degree of effect on public health or safety***

The preferred alternative will have a long-term minor beneficial impact to health and safety. The construction of a new bridge will address a number of substantial safety issues: seismic concerns, deteriorating deck, substandard rails, and lead paint would be abated.

### ***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***

As described in the EA, minor to moderate effects to natural and cultural resources were identified for the preferred alternative. There are no prime farmlands, wild and scenic rivers, or ecologically critical areas affected. Temporary impacts to wetlands would occur from potential temporary crane pads that may be needed for the bridge construction, construction access roads, and piers from the new bridge. Total permanent wetland impacts would be approximately 0.04 acre. These impacts would be mitigated by the removal of the existing bridge piers and restoration of the wetlands after construction. Temporary crane pads would also be removed (if constructed) and any wetland impacts would be rehabilitated. As mentioned above, adverse impact to the historic bridge removal will be mitigated.

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

Implementation of the project will not result in controversial effects on the human environment. This conclusion is based on the low number of comments received during the EA review period and that most of the comments received during the public comment period indicated a preference for the Selected Action.

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

There are no identified risks associated with the preferred alternative that are unique or unknown, and there are no effects associated with the preferred alternative that were

identified as highly uncertain during the analysis for the EA or during the public review of the EA.

***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 preferred alternative does not establish a precedent for any future actions that may have significant effects, nor does it represent decisions about future considerations. The purpose of this action is to address safety concerns associated with the deterioration of the Lamar River Bridge, and to maintain existing vehicular access to the northeast portion of the park.

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

No major (significant) cumulative effects were identified in the EA. The EA did identify long-term minor beneficial impacts to health and human safety and socio economics, and long-term moderate beneficial impacts for park operations. Long-term minor to moderate adverse impacts would occur for water resources, floodplains, and hydrology, as well as historic properties.

***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.***

The Lamar River Bridge lies within the Northeast Entrance Road Historic district which extends 28.61 miles from the northeastern boundary to the intersection with the Grand Loop Road at Tower Junction. The road corridor includes the road, the bridges, and a 10-foot section on either side of the road and any designed pullouts. The Lamar River Bridge and the Northeast Entrance Road, including historic features such as culverts, bridges, and retaining walls, are eligible for the National Register. Replacing the entire bridge adjacent and upstream of its existing location would have a minor impact to the Northeast Entrance Road Historic District and an adverse impact to the bridge. In order to mitigate the adverse effect of removing the bridge, the new bridge will be constructed using design elements of the existing bridge and the existing bridge would be documented according to the standards of the Historic American Engineering Record prior to the removal of the structure. To further mitigate the adverse effect, the Wyoming State Historic Preservation Officer, the Wyoming Division of Travel and Tourism, the Wyoming Attorney General's Office, and Yellowstone National Park have entered into a Memorandum of Agreement stipulating further actions to mitigate the adverse effect.

Compliance with §106 of the National Historic Preservation Act was completed with a concurrence with the NPS determination of moderate adverse impacts on historic properties affected by the Wyoming State Historic Preservation Officer on October 27, 2009.

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

The U.S. Fish and Wildlife Service (USFWS) has prepared a Biological Opinion for the Yellowstone National Park Roads Program which included this bridge project. Consultation for this project was completed as part of the formal consultation with USFWS on the parkwide road program. The biological opinion signed on January 21, 2009, concurred with a finding of "likely to adversely affect" gray wolves (*Canis lupus*) and "not likely to adversely affect" Canada lynx (*Lynx canadensis*) and proposed critical habitat for lynx. The Lamar River Bridge portion of the project would constitute a "no effect" for Gray Wolves due to timing of the project and the short section of road involved with the project, as long as no den sites are established within one mile of the project site (this will be confirmed prior to construction), and a "may affect, not likely to adversely effect" for Canada lynx and proposed critical habitat. This project is not located in a lynx analysis unit (LAU), and habitat is considered unsuitable for lynx. No lynx have been detected within the project area.

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

This action violates no federal, state, or local environmental protection laws.

**APPROPRIATE USE, UNACCEPTABLE IMPACTS, AND IMPAIRMENT**

Sections 1.5 and 8.12 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the National Park System. The proposed project was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest would be served. Section 9.2.1.1 (Park Roads) allows for meeting the transportation needs of the park. These systems are intended to provide for safe and efficient travel with minimal or no impacts to natural and cultural resources. Therefore, the Park Service finds that the preferred alternative is an appropriate use. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts would occur and that satisfactory reclamation of the disturbed area is expected to be achievable, implementation of the preferred alternative would not result in any unacceptable impacts.

In analyzing impairments in the NEPA analysis for this project the NPS takes into account the fact that if an impairment were likely to occur, such impacts would be considered to be major or significant under CEQ regulations. This is because the context and intensity of the impact would be sufficient to render what would normally be a minor or moderate impact to be major or significant. Taking this into consideration, NPS guidance documents note that "Not all major or significant impacts under a NEPA analysis are impairments. However, all impairments to NPS resources and values would constitute a major or significant impact under NEPA. If an impact results in impairment, the action should be modified to lessen the impact level. If the impairment cannot be avoided by modifying the proposed action, that action cannot be selected for implementation (*Interim Technical Guidance on Assessing Impacts and Impairment to Natural Resources*, National Park Service, Natural Resource Program Center, July 2003).

In addition to reviewing the definition of "significantly" under the NEPA regulations, the NPS has determined that implementation of the preferred alternative would not constitute an impairment to the integrity of Yellowstone National Park's resources or values as described by NPS *Management Policies* (NPS 2006 § 1.4). This conclusion is based on the NPS's analysis of the environmental impacts of the proposed action as described in the EA, the public comments received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in 2006 NPS *Management Policies*. The EA identified less than major adverse impacts on water resources; floodplains; hydrology; historic properties; health and human safety; park operations; and socio-economics. This conclusion is further based on the Superintendent's professional judgment, as guided and informed by the *Parkwide Road Improvement Plan*. Although the project has some negative 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.



## PUBLIC INVOLVEMENT

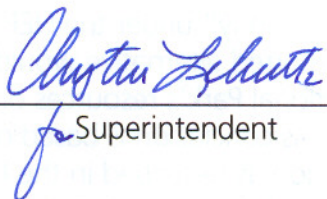
The environmental assessment was made available for public review and comment during a 30-day period ending September 25, 2009. A total of 13 responses were received. Seven comments clearly stated a position favoring Alternative C (the preferred alternative), two comments were clearly in favor of keeping the road open during construction, one comment favored Alternative B, and one comment stated the bridge did not need replacing. This total includes two letters from agencies (Wyoming Game and Fish Department, Northern Cheyenne Tribal Historic Preservation Office), and 11 from individuals. No form letters were received.

The only substantive comments to the EA centered on ensuring that the pullouts at each end of the bridge are kept and enlarged if possible for fisherman, hiker, and skier use. These concerns resulted in no changes to the text of the environmental assessment as pullouts would be included in the new design. The FONSI will be posted to the Planning, Environment and Public Comments (PEPC) website for access by the public.

## CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The preferred alternative 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 localized to widespread, 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 National Register of Historic Places, 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:  11-13-2009  
Superintendent Date

Approved: \_\_\_\_\_  
Regional Director, Intermountain Region Date



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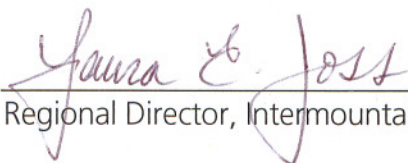
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Recommended:

\_\_\_\_\_  
Superintendent

\_\_\_\_\_  
Date

Approved:

*for*   
Regional Director, Intermountain Region

*11/23/09*  
Date

# **ERRATA SHEETS**

## **LAMAR RIVER BRIDGE ENVIRONMENTAL ASSESSMENT**

### **YELLOWSTONE NATIONAL PARK**

The only substantive comment to the Lamar River Bridge Environmental Assessment centered on replacement of existing turnouts present at each end of the bridge. The turnouts are included in the plan and will be constructed as part of this project.

#### **TEXT CHANGES**

Change the last sentence of the Construction Schedule paragraph on page 17 to read, The project is anticipated to begin in the fall of 2010 or the Spring of 2011, but could be delayed dependent upon construction funding.

Change the text of the second sentence of the first bulleted paragraph on page 18 to read: Any water used for dust control would be taken from the Lamar River at the jobsite.

Change the text on page 23 (second paragraph after bullet statements) to read: Alternative B, *Replace Existing Bridge along Existing Alignment* is the environmentally preferred alternative because it best addresses these six evaluation factors and would keep the new piers much closer to their existing locations; requiring less permanent disturbance outside the existing roadway.

Change the text on page 23 to remove the first sentence in the third paragraph after bullet statements.

#### **SUBSTANTIVE COMMENTS**

##### **Turnouts**

*Comment:* There should be turnouts at each end of the bridge for fishing access, hikers, cross-country skiers, and taking of photographs, especially during the winter. The current Lamar River Bridge has one turnout at each end. The turnouts for the new bridge should be enlarged to accommodate more and larger vehicles. This is a popular place to cross country ski and therefore packed with cars in the winter.

*Response:* This project will replace the existing turnouts with paved turnouts at each end of the new bridge. These turnouts will be designed to the same size as the existing turnouts, which according to local rangers adequately accommodate existing use.