



National Park Service
U.S. Department of the Interior

Yellowstone National Park
Idaho, Montana, Wyoming

FINDING OF NO SIGNIFICANT IMPACT
Lewis River Bridge Replacement

Recommended:

Cameron H. Sholly
Superintendent, Yellowstone National Park

12/20/18

Date

Approved:

Kate Hammond
Acting Regional Director, Intermountain Region, National Park Service

12/21/2018

Date

INTRODUCTION

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) prepared an Environmental Assessment (EA) to examine alternative actions and environmental impacts associated with replacement of the Lewis River Bridge within Yellowstone National Park. The project is needed to bring the bridge structure back to excellent condition for the long term, improve pedestrian safety, and reduce localized vehicle congestion.

The statements and conclusions reached in this finding of no significant impact (FONSI) are based on documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below.

SELECTED ALTERNATIVE AND RATIONALE FOR THE DECISION

Based on the analysis presented in the EA, the NPS selected Alternative B – Replace Bridge on New Alignment East of Existing Bridge (the NPS preferred alternative).

The selected alternative will replace the existing Lewis River Bridge on a new alignment directly east of the existing bridge. The South Entrance Road will be shifted several hundred feet on either side of the bridge to line up with the new bridge. Traffic will be carried on the existing bridge while the new bridge is under construction. Once construction is complete, the existing Lewis River Bridge will be removed. A temporary work bridge will be constructed within the alignment of the new bridge in order to facilitate its construction. This work bridge will be removed prior to completion of the new bridge. Construction is anticipated to last three months the first year (August-October) and up to two full construction seasons (April-November each year) after that.

The existing parking area on the southwest corner of the existing bridge will be reconfigured and expanded by approximately 10,000 square feet. This will allow space for about 24 cars and two to three oversized vehicles. The ingress, egress, and pedestrian areas associated with this parking area will also be improved by expanding turning radii for vehicles and marking parking spaces. The vehicle pullouts on the northeast and northwest of the bridge will be reconstructed as well to allow for about 18-20 cars and two to three oversized vehicles on the west side of the road, and about 6 cars on the east side of the road. The pullout located southeast of the bridge will not be retained to avoid additional encroachment on wetlands in the project area.

During construction, visitor traffic will utilize the existing two-way bridge. Traffic delays may occur during working hours for equipment and material maneuvering, including a two-week period, in either the spring (before Memorial Day) or fall (after Labor Day), where there may be up to six-hour intermittent delays. There will be no delays during hours when no construction activities are occurring. Staging and stockpiling of equipment and materials for bridge construction will be within the new alignment and in some locations along the existing alignment, at the South Entrance Pit, the Lewis Lake Pit, and the Grant Village Pit.

Rationale

Alternative B was selected because it best meets the project purpose to:

- Bring the bridge structure back to excellent condition for the long term.
- Improve pedestrian safety.
- Help reduce localized vehicle congestion.

MITIGATION MEASURES

Refer to Appendix A for a complete list of all mitigation measures that will be implemented for the selected alternative.

FINDING OF NO SIGNIFICANT IMPACT

CEQ regulations at 40 CFR Section 1508.27 identify 10 criteria for determining whether the Selected Action will have a significant effect on the human environment. The NPS reviewed each of these criteria given the environmental impacts described in the EA and determined there will be no significant direct, indirect, or cumulative impacts under any of the criteria.

As described in the EA, the selected alternative has the potential for small adverse impacts on Wetlands, Visitor Use and Experience, and Wild and Scenic Rivers; however, no potential for significant adverse impacts were identified.

Construction of a 300-foot long replacement bridge will permanently impact 0.25 acres of wetland. Permanent wetland impacts will be mitigated in accordance with NPS Wetland Protection Guidelines, DO 77-1. Since the wetlands impacted by this project are 0.25 acres or less, a Wetland Statement of Findings is not required.

Compensatory mitigation for the 0.25 acres of permanent wetland impacts will be accomplished through the removal of 1.88 acres of road fill presently located within the park's lower Pelican Creek drainage system: 1,300 linear feet of causeway will be removed and replaced with a viaduct to restore wetland acreage and function.

Temporary adverse impacts to wetlands associated with reconstruction of the Lewis River Bridge and temporary bridge will include temporarily covering the one forested wetland (0.02 acres) identified within the project area with fill material for the temporary bridge, an increase in turbidity from installation and removal of bridge piers, and a potential increase in sedimentation from erosion during construction of the bridge abutments and regrading of the parking lot and road. The temporary work bridge and the existing bridge will be removed when reconstruction of the replacement bridge is completed. Temporary wetland impacts from construction will be rehabilitated. Thus, temporary adverse wetland impacts will last only as long as the project.

Actions during the construction window (April–November for two consecutive years) will have a small adverse impact on visitor experience. There will be 30-minute traffic delays. Six longer closures, lasting up to six hours each, may be needed over a span of two weeks to set bridge girders. These closures will be done outside of peak visitation periods, but several thousand visitors could be delayed or may choose another route during the closures. Closures during construction will also prevent visitors from accessing the trail to Lewis River Falls and nearby pullouts. Construction noise will occur during April–November for two seasons. This noise will be intermittent and will not be audible beyond about a half mile from the project area.

This project will have some beneficial impacts on the visitor experience. The parking area that serves the Lewis Falls Trail will be improved and slightly expanded. This will allow for approximately 10 more vehicles to park at this popular viewing area for Lewis Falls. The newly designed parking area will also reduce vehicle queueing and increasing the rate at which vehicles can cycle through. Parking, sidewalk, and roadway improvements will also improve visitor safety by better separating pedestrians and vehicles. Over the next 50 years (the lifespan of a new bridge), tens of millions of visitors will enjoy the benefits of a bridge replacement,

associated parking improvements, widened pedestrian walkways, and better pedestrian/vehicle separation.

This project will create beneficial impacts on the free-flowing condition of Lewis River. Removing the four piers in the river below the existing bridge and constructing a single pier on an island in the river will remove a slight impediment to the river's free-flowing condition and improve natural hydrological processes in the project area. Removing scuppers on the bridge and adding a surface drainage system that does not allow bridge surface runoff may slightly improve water quality in the river. These changes will be a permanent beneficial impact, affecting the project area and the stretch of river just downstream.

The river channel at the existing bridge location is approximately 215 feet wide. The width of the active channel will not be altered. The cross-sectional shape and depth characteristics of the active channel will also not be altered. The channel slope at the bridge crossing location, which is of low gradient, will not be altered.

The Lewis River Bridge project is part of a Parkwide Roads Program for which Section 7 has been completed. The Parkwide Road Biological Assessment was submitted to the U.S. Fish and Wildlife Service (USFWS) in 2008 and the subsequent Biological Opinion prepared by the USFWS was completed in 2009.

Currently, the Canada lynx (*Lynx canadensis*) and grizzly bear (*Ursus arctos horribilis*) are the park's only listed species under the Endangered Species Act. The Lewis River Bridge project area lies outside of designated Critical Habitat for the lynx and there is no known lynx occupation near the project area; therefore, this project will have no effect on the lynx. This project is unlikely to adversely affect grizzly bears because 1) mitigation measures will be implemented to inform project workers about food storage, bear safety, and bear encounters; and 2) the project area is within a road corridor not commonly used by grizzly bears.

There are no known archeological resources located within the proposed project area. Appropriate steps will be taken to protect any unknown archeological resources inadvertently discovered through the implementation of either alternative discussed in this EA (see Mitigation Measures). The Lewis River Bridge is located within the South Entrance Road historic district (48YE823), however the bridge is considered non-contributing to the district. The Lewis River Bridge is not a National Register eligible structure, nor is it a contributing element of any other historic district; therefore, there will be "no adverse affect to historic properties" from this proposed project. The project will not result in the loss or destruction of significant scientific, cultural, or historical resources.

The project will not result in the loss or destruction of significant cultural or historical resources, nor will there be any significant impacts on public health, public safety, or 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 NPS selected alternative will not violate any federal, state, or local environmental protection law.

Tribal consultation letters were mailed in November 2018 to members of Yellowstone's 26 associated tribes. Two responses were received, one unrelated to the project, and one expressing no concerns.

CONCLUSION

As described above, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement (EIS). The selected alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA.

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

Appendix A: Mitigation Measures

The following mitigation measures will minimize the degree and/or extent of adverse impacts and will be implemented during the project.

General Construction

- To minimize the amount of ground disturbance, staging and stockpiling areas will be located in existing parking areas, away from visitor use areas to the extent possible. All staging and stockpiling areas will be returned to pre-construction conditions following construction.
- Construction zones will be identified and where construction occurs next to vegetated areas that may be impacted, construction limits will be 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 construction zone as defined by the construction zone fencing.
- To reduce noise and emissions, construction equipment will not be permitted to idle for more than 10 minutes while not in use according to the Superintendent's Compendium, based on CFR 36 §5.13 Nuisances.
- To minimize possible petrochemical leaks from construction equipment, the contractor will regularly monitor and check construction equipment to identify and repair any leaks. Refueling and servicing equipment will be done within the turnouts and away from water bodies when feasible. Spill kits will be required at the construction site at all times.
- Construction workers and supervisors will be informed about special status species. Contract provisions will require the cessation of construction activities if a species were discovered inhabiting the project area, until park staff re-evaluates the project. This will allow modification of the contract for any protection measures determined necessary to protect the discovery.
- The NPS will ensure 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 may include implementation of daily construction activity curfews, such as not operating construction equipment on busy holiday weekends. The NPS will determine this in consultation with the WFLHD.
- Construction workers and supervisors will be informed about the special sensitivity of park's values, regulations, and appropriate housekeeping.
- According to NPS Management Policies (2006), the NPS 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 will emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The NPS also reduces energy costs, eliminates waste, and conserves energy resources by using energy-efficient and cost-effective technology.

Air Quality

- Equipment will not be allowed to idle for more than 10 minutes while not in use.
- All motor vehicles and equipment will have mufflers conforming to original manufacturers' specification that are in good working order and are in constant operation to prevent excessive or unusual fumes or smoke.
- All haul loads will be tarped.
- Dry conditions can cause dust to be generated by construction activities. This dust will be controlled by spraying water on the construction site, if necessary.

Soils and Geology

- If unknown conditions or problems (steam, water, heat, or voids) are encountered during the placement of bridge piers for the temporary bridge or the reconstructed bridge, the park geologist will be notified before the drilling to allow the opportunity to observe sediment layers during the process.

Vegetation

- Revegetation and recontouring of disturbed areas will take place following construction and will be designed to minimize the visual intrusion of structures. 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.
- Any equipment used will be cleaned using NPS protocols for reducing the spread of non-native species.
- 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.

Archeological, Ethnographic, and Paleontological Resources

- All contractors and subcontractors will be informed of the procedures to follow in the event of archeological, ethnographic, and paleontological resource discovery, as well as the penalties for illegally collecting artifacts or intentionally damaging paleontological materials, archeological sites, or historic properties.
- During construction, specifically activities involving earthwork or digging, qualified park staff will monitor work zones to confirm the presence or absence of significant archeological, ethnographic, or paleontological resources. Should construction unearth cultural or paleontological resources, work will be stopped in the area of discovery and the park will consult with the State Historic Preservation Office (SHPO) in accordance with §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) will be followed.

Cultural Resources

- Should construction unearth previously undiscovered cultural resources, work will be stopped in the area of any discovery and the park will 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 and the inadvertent discovery

clause in the Parks Roads Programmatic Agreement. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.

Historic Structures

- In order for this bridge and site design to be as compatible with the historic architectural characteristics on the South Entrance road segment, the design will incorporate similar architectural features, such as materials, stone patterns, surface finishes, and color, as those found on other structures of the road.

Soundscapes

- Equipment will not be allowed to idle for more than 10 minutes while not in use.
- All motor vehicles and equipment will have mufflers conforming to original manufacturers' specification that are in good working order to prevent excessive noise.

Vegetation and Soils

- Construction zones will be identified (i.e., flagging, construction tape, etc.) to confine activity to the minimum work area required.
- Construction equipment will be cleaned before entering the park to minimize the transport of exotic seeds to the site. All equipment entering the park will be inspected and may be required to be pressure washed to remove foreign soil, vegetation, and other materials that may contain non-native seeds or vegetation.
- Construction materials staging areas will be restricted to previously disturbed sites.
- Erosion control measures that provide for soil stability and prevent movement of soils will be implemented, such as installing erosion control wattles or sediment fences along the edge of construction.
- Any disturbed topsoil will be salvaged and used to restore the area.

Visitor Use and Experience

- Signs, alerts, press releases, and notifications will be issued to inform visitors of traffic delays prior to and throughout the duration of construction.
- Construction zones will be identified (i.e., flagging, construction tape, fencing, etc.) to prevent visitors from entering the construction zone unknowingly.
- Construction materials staging will be restricted to areas that will not impede vehicle traffic of visitors, contractors, or park staff.
- Traffic flow will be maintained through the construction zone over the existing bridge. Speed limit through the construction zone will be posted at 15 mph.
- Equipment will not be allowed to idle longer than 10 minutes when not in use. All haul loads will be tarped if required and no engine brakes will be used in or near developed areas and campgrounds.
- All motor vehicles and equipment will have mufflers conforming to original manufacturer specifications that are in good working order and are in constant operation to prevent excessive or unusual noise, fumes, or smoke.

Wildlife

- Construction personnel will be oriented on appropriate behavior in the presence of wildlife and proper food storage, handling, and disposal and/or other attractants.
- Ensure all project-related employees, such as contractor's employees, will be given orientation on how to avoid disturbing or encountering bears and how to minimize unavoidable effects or encounters. Orientation will include information about park

regulations regarding food storage, disposal of garbage and other bear attractants, and approaching or harassing wildlife.

- The location and height of cut and fill slopes, retaining walls, and guardrails associated with the bridge project should be designed to allow wildlife that attempt to cross or travel the road to rapidly escape if threatened by on-coming vehicles.
- To avoid impacts to migratory birds during nesting season, all tree removal activities will be conducted outside of March 1-August 15 for raptors and May 1-August 1 for songbirds.
- If tree and shrub removal activities are within the March 1-August 15 window, and active nests are suspected from detection of physical structures (e.g., large collections of sticks or smaller plant material in nest-like shape, cavity holes) or behaviors (e.g., birds in and out of tree cavities, activity at nest-like structures in trees, birds carrying food into nest-like structures), bird surveys will be conducted before any tree removals.
- If any nesting birds are found, they will not be disturbed until any young have fledged the nests. Any grubbing and clearing will occur during non-nesting periods or after a survey of the area showing no active nests being located.
- Construction site and staging areas will be monitored by park natural resource staff throughout the project in case any special status species unexpectedly appear in the project area. Should any appear and park staff become concerned about potential adverse impacts on the species from construction or other project related activities, work will stop and not resume until necessary protective steps are taken to avoid any impacts to the special status species.

Water Resources

- Stormwater runoff control measures, including silt capture techniques such as silt fences, will be employed to improve quality of runoff and prevent degradation of water resources. Spill kits will be available on-site at all times.
- Design and construction measures will include development of surface water control features, such as swales, to minimize post-construction runoff.
- Equipment will not be allowed to operate within the river. If any pumping of water is required, it will be discharged to an upland site.
- The removal of the existing bridge will require confinement techniques to prevent construction debris from entering the Lewis River.
- Construction vehicles could leak fluids into the river and wetlands. To minimize this possibility, equipment will be checked frequently to identify and repair any leaks.
- Fuel and oil services for construction machinery will be provided in a designated area away from the river and wetlands when feasible. This will include secondary containment for all fuel storage tanks and on-site availability of a spill kit.
- Best management practices will be used to reduce sedimentation and turbidity for all construction activities, including pulling existing piers and abutments and in-water work.
- Design will be completed in such a way as to leave the shoreline of the river in its present configuration with no change to hydraulics of the river.

NON-IMPAIRMENT DETERMINATION

Lewis River Bridge Replacement

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of the Interior and the National Park Service (NPS) to manage units "to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (54 U.S.C. 100101). NPS *Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values:

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

An action constitutes impairment when its impacts "harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values" (NPS 2006, Section 1.4.5). To determine impairment, the NPS must evaluate the particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts. An impact on any park resource or value may constitute impairment, but 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 to opportunities for enjoyment of the park; or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance (NPS 2006, Section 1.4.5).

Fundamental resources and values for Yellowstone National Park are identified in the enabling legislation for the park, the Foundation for Planning and Management Statement, and the Long Range Interpretive Plan. Based on a review of these documents, the fundamental resources and values for Yellowstone National Park come from the park's geologic wonders, the abundant and diverse wildlife, the 11,000-year-old continuum of human history, and providing for the benefit, enjoyment, education, and inspiration of this and future generations. Resources that were carried forward for detailed analysis in the EA and are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, are key to the natural or cultural integrity of the park, and/or are identified as a goal in relevant NPS planning documents include wetlands and wild and scenic rivers. Accordingly, a non-impairment determination is made for each of these resources. Non-impairment determinations are not

necessary for visitor use and experience because impairment findings relate back to park resources and values, and this impact topic is not generally considered a park resource or value according to the Organic Act.

This non-impairment determination has been prepared for the selected alternative, as described in the Finding of No Significant Impact for the Lewis River Bridge Replacement EA.

Wetlands

The project area contains four wetland system types: palustrine forested, palustrine scrub-shrub, palustrine emergent, and riverine. Each classification exhibited slightly different water regimes. The one palustrine forested depression within the study area likely receives hydrology from groundwater flow and snowmelt. The four palustrine scrub-shrub systems form a riparian buffer within the floodplain of the Lewis River, receiving water from the Lewis River and snowmelt. The two palustrine emergent systems consisted of snowmelt fed wet meadows and a small wetland island located between two branches of the Lewis River. An intermittent stream was found near the southern portion of the study area and seems to convey water from wetland (LRB001) under the road to the Lewis River.

Implementation of the selected alternative will impact 0.25 acre of wetland at most. Compensatory mitigation for the 0.25 acres of permanent wetland impacts will be accomplished through the removal of 1.88 acres of road fill presently located within the park's lower Pelican Creek drainage system: 1,300 linear feet of causeway will be removed and replaced with a viaduct to restore wetland acreage and function.

Temporary adverse impacts to wetlands associated with reconstruction of the bridge and temporary bridge will include temporarily covering the one forested wetland (0.02 acres) identified within the project area with fill material for the temporary bridge, an increase in turbidity from installation and removal of bridge piers, and a potential increase in sedimentation from erosion during construction of the bridge abutments and regrading of the parking lot and road. The temporary work bridge and the existing bridge will be removed when reconstruction of the replacement bridge is completed. Temporary wetland impacts from construction will be rehabilitated. Thus, temporary adverse wetland impacts will last only as long as the project (e.g., April–November for two consecutive years).

All construction activities near wetlands will be confined to the smallest area necessary to complete the work. The permanent loss of 0.25 acres of existing wetlands will be small at both the local and watershed scale and thus, will not impair park wetlands.

Wild and Scenic Rivers

On March 30, 2009, passage of the Craig Thomas Snake Headwaters Legacy Act of 2008 added 414 miles of rivers and streams of the Snake River Headwaters to the national wild and scenic rivers system. The purpose of this designation is to protect the free-flowing character, water quality, and outstandingly remarkable values for the benefit and enjoyment of present and future generations. Under the selected alternative in the Snake River Headwater Comprehensive River Management Plan / EA (2013), the headwaters are to be managed as a more primitive, undeveloped, natural setting with modest improvements to enhance resource conditions and visitor experience. The Lewis River, of which this bridge replacement project crosses, is part of that system. The segment of river in the project area is designated as Scenic.

The Lewis River Scenic Segment parallels the South Entrance Road for approximately 12 miles to the southern boundary of Yellowstone National Park. Approximately 5,730 vehicles per day travel on this route during peak season. Sixteen road turnouts and parking areas provide additional access to view the river. These points also provide river access to anglers, many of whom are fishing for brown trout which are prevalent in this segment. Boating is not allowed due to the extreme gradient and narrow canyon walls.

The pullouts and parking areas directly adjacent to the Lewis River Bridge will be closed during construction, creating a small, temporary adverse impact on the visitor experience. However, after parking and pedestrian circulation improvements, visitor access to viewpoints and the river's edge for activities such as photography, fishing, site-seeing, and hearing natural sounds will be permanently improved.

This project will not alter the width, cross-sectional shape, and depth characteristics of the active river channel. Removing the four piers in the river below the existing bridge and constructing a single pier on an island in the river will remove a slight impediment to the river's free-flowing condition and improve natural hydrological processes in the project area. Removing scuppers on the bridge and adding a surface drainage system that does not allow bridge surface runoff may slightly improve water quality in the river. These changes will be a permanent beneficial impact, affecting the project area and the stretch of river just downstream.

The selected alternative will not adversely alter the natural flow of the Lewis River or any of the 414 miles of rivers and streams of the Snake River Headwaters. Minor increases in turbidity will likely occur during construction of the bridge, but not at a level that will affect fish or other aquatic organisms within the river. As a result, the NPS has determined that the selected alternative will not result in an impairment of Wild and Scenic River resources within the park.

Conclusion

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 alternative. The NPS has determined that implementation of the selected alternative will not constitute an impairment of the resources or values of Yellowstone National Park. This conclusion is based on consideration of the park's purpose and significance, a thorough analysis of the environmental impacts described in the EA, comments provided by the public and others, and the professional judgment of the decision maker guided by the direction of *NPS Management Policies 2006*.

TEXT CHANGE ERRATA

There were no changes to the text of the Environmental Assessment due to the public comment period.

RESPONSE TO PUBLIC COMMENTS ERRATA

This EA was released for public review from October 30, 2018 to November 30, 2018. The EA was made available in hard copy and digital format. A press release was distributed to approximately 200 media outlets, numerous local chambers of commerce, local visitor centers, public officials, social media, the park's website, regulatory agencies, and affiliated Native American tribes.

Copies of the document were posted on the NPS PEPC website at <http://parkplanning.nps.gov/lrb>. A total of 11 pieces of correspondence were received that included four substantive comments. Substantive comments were condensed into four concern statements and a response to each statement is provided below.

Visitor Use

Concern Statement – A recommendation that during the process of repairing bridges and other infrastructure, an assessment regarding the impact of visitors on the Yellowstone National Park infrastructure should also be included.

NPS Response – Yellowstone park staff are currently studying visitor travel patterns, visitor impacts on resources, and trends in the visitor experience. Information obtained from these efforts will inform future actions related to park infrastructure, visitor circulation and movements, and where additional resource protection measures are needed.

Construction Materials

Concern Statement – A recommendation to use materials more in keeping with the beauty of the park such as stone rather than concrete.

NPS Response – Stone masonry will be incorporated into the wing walls, retaining walls, and bridge abutments of a replacement bridge.

Bridge Repair

Concern Statement – A recommendation to keep the current bridge as is and repair it in place.

NPS Response – In order to repair the bridge in place, the roadway and bridge would need to be closed for a minimum of at least one season, possibly longer. This would significantly disrupt travel on the South Entrance Road. Relying solely on bridge repairs would also be costly and would only create a short extension in lifecycle.

Wildlife

Concern Statement – A recommendation to include modifications to the proposed project to increase safe wildlife movement and reduce the potential for wildlife-vehicle collisions.

NPS Response – Wildlife strikes in this area have not been an observed problem. Past studies on road-killed wildlife in the park have indicated a rise in wildlife strikes when speed limits reach or exceed 55 mph (Gunther et. al., 2000). The speed limit in the project area will remain 25 mph. The new bridge will be slightly longer than the existing bridge which will allow added space between the bridge abutment and the river's edge to be used by wildlife that chooses to pass under the bridge. A new wider bridge and approaches, along with expanded vehicle parking areas, will increase sight distances for operators of motor vehicles. Because of the lower speed

limit and increased visibility, vehicle operators will have increased reaction time to avoid collisions with wildlife. Because of the changes proposed with this project, chances of a wildlife-vehicle collision should be lower in the future within the project area.

References:

Gunther, K.A., M.J. Biel, and H.L. Robison. 2000. *Influence of vehicle speed and vegetation cover type on road-killed wildlife in Yellowstone National Park*. Pages 42 - 51 in T.A. Messmer and B. West, editors. *Wildlife and Highways: Seeking Solutions to an Ecological and Socio-Economic Dilemma*. Proceedings of the 7th Annual Meeting of The Wildlife Society, Nashville, Tennessee, USA.

