



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

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

**FINDING OF NO SIGNIFICANT IMPACT  
Yellowstone River Bridge Replacement**

Recommended:

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3/23/20  
Date

Approved:

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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 Yellowstone River Bridge within Yellowstone National Park. The project is needed to address serious bridge structural deficiencies; severe bank sloughing and scour; pedestrian accessibility and safety concerns; and 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 South of Existing Bridge (the NPS preferred alternative). A summary of this alternative is presented below; for additional information, see pages 13-21 in the EA.

The selected alternative will replace the existing Yellowstone River Bridge (605-foot long) with a new bridge (1,175-foot long) on a new alignment approximately 500 feet south of the existing bridge. Just over one mile of the Northeast Entrance Road will be shifted several hundred feet south of its existing alignment 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 and road is under construction. Once construction is complete, the existing Yellowstone River Bridge, and approximately one and a half miles of the existing Northeast Entrance Road will be removed. Temporary work bridges will be constructed adjacent to the alignment of the new, and existing, bridges in order to facilitate their construction and deconstruction. These work bridges will be removed prior to completion of the project. Construction is anticipated to last three years with most construction occurring during the months of April-November, though no restrictions on winter work will occur if weather allows.

As part of this project, five to seven turnouts will be constructed, paved, and sized for 3-5 cars. These turnouts will improve opportunities for wildlife viewing, trail and fishing access, while serving as rest areas for drivers. Paved trailhead parking will be constructed for three trails: Garnet Hill Trail, Yellowstone River Trail, and Confluence of the Yellowstone and Lamar Rivers Trail. The first two will be designed for 6 to 10 cars. Bus parking will be provided at the trailhead for the Confluence of Yellowstone and Lamar Rivers Trail as well as spaces for 8-12 cars. Each trailhead parking area will be designed to allow for safe and adequate parking and set further back from the mainline road to allow for maneuvering out of spaces without backing onto the main road.

Improvements to the Yellowstone River Picnic Area will include doubling the number of parking and picnic sites to about 25 to 30 sites. The sites will be paved and the area will be designed to accommodate RVs. Two access/egress points to the Northeast Entrance Road will be provided if the final design warrants it. An additional vault toilet will be added. The expanded area will not exceed three acres. Mature trees will be protected to the extent possible.

A fish barrier, weir or similar structure will be installed to protect the Yancy's Hole and Elk Creek drainages from non-native fish species (rainbow and brook trout) that could migrate up Lost

Creek from the Yellowstone River. The structure will be designed with input from the park fisheries biologist. It will likely include a 6-foot vertical barrier and hardened bottom (e.g., flagstone) to prevent pool formation to prevent fish from jumping the barrier. The fish barrier will likely be constructed using natural stone from the banks of the existing stream to avoid instream work.

During construction, visitor traffic will utilize the existing two-way bridge. The flow of vehicle traffic on the existing road and bridge will be maintained during the construction period. Traffic will continue to flow in its normal pattern until the new road and bridge are constructed. Traffic will then be diverted to the new roadway and bridge, and finally the existing roadway and bridge will be obliterated and restored to natural conditions. There will be no traffic delays during hours when no construction activities are occurring. The selected action has minimal traffic disruption. 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 Frog Rock Pit, the Grebe Lake Pit, and the Norris Pit.

The Yellowstone River Picnic Area, the Wrecker Pullout, and associated parking turnouts along the Northeast Entrance Road within the project area will be closed when construction is occurring in these areas.

### **Rationale**

Alternative B was selected because it best meets the project purpose to replace the Yellowstone River Bridge in order to preserve safe visitor access to and from the Northeast Entrance and improve the visitor experience. In addition, the selected action has minimal impacts on visitor traffic. Moving the bridge onto a new alignment will create a new disturbance on the landscape. However, once construction and restoration are complete, implementation of the selected action will result in a reduction of paved-road mileage in the park.

### **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 alternative 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.

The following impact topics were dismissed from full analysis in the EA and are not discussed in this FONSI: Air Quality & Green House Gas Emissions, Archeological Resources, Ethnographic Resources, Floodplains, Fish, Geological Resources, Historic Structures, Indian Trust Resources and Sacred Sites, Lightscares, Natural Soundscapes, Water Quality and Quantity, and Wildlife. There will be no 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.

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

### **Impacts include:**

#### Geothermal Resources

The selected action will avoid active thermal areas on the surface, including the popular visitor destination known as Calcite Springs. A 2019 subsurface investigation revealed the presence of both hot ground and water in some locations within the construction limits. Additional subsurface investigation will guide final design. While subsurface hot areas do exist beneath the alignment for the selected action (Alternative B), including the bridge location, the potential for adverse impact on geothermal features is negligible largely because: 1) the project has been sited to avoid the most active thermal areas, 2) road realignment is largely a “surface” disturbance that does not result in deep subsurface alterations; and 3) runoff from paved areas will be routed to avoid thermal features. In addition, ongoing road maintenance activities, as well as visitor and administrative use of the road will largely be confined to “paved areas”. These risks will likely not be measurable and will not result in any change to any surface geothermal feature. Additionally, bridge pier designs will use mitigation measures such as shallow footings to avoid changing any dynamics of geothermal processes in the project vicinity. The potential impacts of this project are thus limited to heat dissipation from the ground to the air through the bridge piers, and the amount will likely not be measurable.

*Cumulative Impacts.* There have been no adverse impacts on geothermal features from past projects such as the road reconstruction from Roosevelt to the Tower Fall Store, or anticipated impacts from the upcoming road reconstruction from the Tower Fall Store to the Chittenden Road, and future road reconstruction of the Northeast Entrance Road, because all were routed, or are being designed, to avoid impacts to thermal features. Because there are no adverse impacts from past, present, or reasonably foreseeable future actions, there will be no cumulative impacts.

#### Visitor Use and Experience

Actions during the construction window (April-November, though no restrictions on winter work will occur if weather allows for three consecutive years) will have some adverse impact on visitor experience. Some equipment noise will be heard in the project area and from the Roosevelt developed area. Hiking trails will remain open though closure of pullouts within the project area will make it harder for visitors to access them. Three to four parking spaces near the vault toilets at Tower Junction will be used for a construction office trailer for three years. The vault toilets and parking for approximately 20-25 vehicles in this area will remain open and available for public use. The pullouts at each end of the existing bridge will remain open to use as long as this road segment and bridge carry traffic. Therefore, fisherman and hikers will still be able to use them until the old road and bridge are removed, and traffic is switched to the new road alignment. The existing Wrecker Parking area and access road will be removed but its function replaced by a new pullout/parking area east of the new bridge constructed to accommodate both cars and oversized vehicles. Upon completion of the project, visitors seeking fishing access to the Yellowstone River near the bridge will need to hike a longer trail to get to the river's edge, requiring about 1,800 feet of additional hiking each direction. This is not expected to change angler use of this area.

Visitor services at Tower-Roosevelt will continue to be available during project construction. Hiking trails will remain open, including the Yellowstone River Trail, though access to these trails from within the project area will be restricted because pullouts at these trailheads, the

Wrecker Parking area, and the picnic area will be closed to parking and vehicles during the 3-year construction period. While visitors could still have access by parking at Tower Junction and hiking cross country to points along these trails, it is unlikely that many visitors would do so, given the other hiking and sight-seeing opportunities in the vicinity, such as Lost Lake, Slough Creek, and Mount Washburn, which offer similar experiences. An increase in use of these other trails could diminish the experience of those hikers seeking more solitude.

The Yellowstone Picnic Area will be closed during construction, eliminating a picnicking opportunity in this part of the park. There is only one other picnic area where visitors could enjoy similar experiences nearby. As a result, some visitors may be displaced to the picnic area that remains open, and not all visitors may be able to find a picnic site during summer. Some visitors may feel their experience is degraded by increased use of the single open picnic site. These impacts will last during the three summers that the Yellowstone Picnic Area is closed. The picnic area will be expanded by approximately 10-20 parking spaces, increasing its current capacity when it is reopened following project completion. Additionally, six to ten new parking spaces will be dedicated to the Yellowstone River hiking trail.

A new road alignment will resolve the existing safety concern of having a tight curve on the east side of the existing bridge by eliminating it. As the new bridge will also be a little over twice the height of the existing bridge, the steepness of the road from both the east and west approaches to the bridge will be constructed to a lesser grade, making the road safer in slick winter driving conditions.

The existing Wrecker Parking area and access road will be removed, though the function will be replaced in the area east of the new bridge that will accommodate both cars and oversized vehicles. Widened walkways on the new bridge will provide access to views of the river for visitors with disabilities.

*Cumulative Impacts.* Widening of the Northeast Entrance Road and the Tower Fall to Chittenden Road Reconstruction projects would impact a narrow corridor along the existing roads. Road widening would make the roads easier to drive for visitors, and thus enhances their safety, but also has a drawback of introducing additional or expanding road cuts and further separating visitors from roadside vegetation, which could make the drive less enjoyable for some. During reconstruction, some visitor traffic would be impacted from short-term delays of up to 30 minutes or potential late-season closures of up to four weeks. These projects would involve construction-related delays, noise, and potential closures of roadside attractions, all of which would impact park visitors. Closures and delays would be advertised in advance to allow visitors to make any desired adjustments in their itinerary. When the effects of the selected action are combined with these past, present, and reasonably foreseeable future impacts, the total cumulative impact on visitor use and experience will be adverse. The incremental impacts of the selected action will add only a few minor delays as traffic will not be impacted by construction that occurs on a new alignment.

### Vegetation

Construction of an approximately 1,175-foot long replacement bridge will result in permanent loss of approximately 14.1 acres of sagebrush and Douglas-fir communities. Additionally, approximately 2.4 acres of these communities will be lost in the expansion of the Yellowstone River Picnic Area. A new trail from the pullout on the east end of the new bridge will require approximately 1.2 acres of new permanent loss, and a fish barrier and repairs to the Lost Creek headcut and streambank damage will temporarily impact about 0.2 acres until it reestablishes in 1 to 3 years. Total permanent impacts to sagebrush and Douglas-fir communities from this alternative will be approximately 17.9 acres. Total permanent plus temporary impacts will equal approximately 24.5 acres. The net loss of sagebrush and Douglas fir vegetation would result in

inconsequential permanent impacts, given it represents about 0.7% of the Yellowstone River drainage within one mile of the bridge site.

*Cumulative Impacts.* A future project to widen the 28-mile Northeast Entrance Road, along with the Chittenden to Tower Road Improvements, would lead to permanent loss of about 24 acres of sagebrush and Douglas-fir community vegetation, and temporarily impact another 50 acres of the same. The Roosevelt parking project, scheduled to begin in 2020, would move a parking area of approximately 30,000 square feet to an area just west of its current location. The parking footprint would expand by no more than 10,000 square feet. The existing parking would be rehabilitated to a natural looking meadow. Additional temporary impacts to sagebrush and Douglas-fir community vegetation are likely during and after construction for both of these projects. Restoration actions to address temporary impacts for each of these projects would likely lead to successful reestablishment of native plants within 3-5 years. When the effects of the selected action are combined with these past, present, and reasonably foreseeable future impacts, the total cumulative impact on vegetation will be adverse with a total loss of 43 acres of sagebrush and Douglas fir community vegetation, with 17.7 of this total contribution from the selected action. This cumulative effect and the contribution of the selected action would be inconsequential in the context of the 1.2 million-acre Yellowstone River watershed in the park.

### Wetlands

No permanent impacts to wetlands will occur, and approximately 0.2 acres of wetlands in the Lost Creek drainage will be reestablished due to removal of a fill slope along the existing road, which is encroaching into Lost Creek. Since no wetlands will be permanently impacted from this bridge replacement project, a Wetland Statement of Findings is not required. The project will temporarily impact 0.09 acres of palustrine emergent wetlands, from river shore disturbance, will be temporarily disturbed by construction of a temporary work bridge, access roads, and staging areas. Turbid water can allow sediment settle on wetland vegetation, stressing or reducing plant density depending on the depth of sediments accumulated. Increased turbidity would not have lasting effects on wetlands as the next snowmelt cycle, typically in May and June annually, will cause high water to flush built up sediment from these wetland areas. Temporary adverse wetland impacts will last only as long as the 3-year construction phase of the project.

*Cumulative Impacts.* Proposed future widening of the Northeast Entrance Road would likely result in adverse impacts to wetlands (typically PEM), namely direct loss due to widening, shifting road alignment, or adding culverts or shoreline erosion control measures. Wherever possible during design, permanent loss of wetlands would be avoided by widening to a side of the road where no wetland is present. In a few complex areas, it's possible that not all wetlands can be avoided. In the few instances when wetlands cannot be avoided, mitigation for wetland impacts is required by NPS policy, which typically requires restoration of already impacted wetlands to offset losses. When the effects of the selected action are combined with these past, present, and reasonably foreseeable future impacts, overall cumulative impacts to wetlands will be small but beneficial from the selected action.

## **CONCLUSION**

The selected alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS) (see Section 1.5.E of the NPS NEPA Handbook). And as described above, 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.

## Mitigation Measures

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

### General Construction

- Construction workers and supervisors will be informed about the special sensitivity of park values, regulations, and appropriate housekeeping.
- Contractors will coordinate with park staff to reduce disruption in normal park activities (i.e., facilitate emergency traffic, hauling material to avoid quiet hours, allow for visitor use in areas where no conflicts or safety concerns exist).
- To minimize the amount of ground disturbance, staging and stockpiling areas will be located within the limits of construction, in existing parking areas or pullouts, and away from visitor use areas, except where specifically noted in the description of alternatives. All staging and stockpiling areas will be returned to pre-construction conditions following completion of the project.
- Construction zones will be identified and critical areas may 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 needed. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the construction zone.

### Air Quality

- 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.
- 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.

### Geothermal

- If unknown conditions or problems (steam, water, heat, or voids) are encountered during construction, the park geologist will be notified before the drilling to allow the opportunity to observe sediment layers during the process. The geologist will be able to stop or change the operation due to potential resource or safety concerns.
- Spread footings or innovative foundation solutions will be used anytime traditional footings (drilled or driven shafts) may threaten subsurface geothermal resources.

## Soils

- In an effort to avoid introduction of exotic plant species, no hay bales will be used. Hay often contains seed of undesirable or harmful alien plant species. Therefore, on a case-by-case basis the following materials could be used for any necessary erosion control: wood bark mulch, straw, sand bags, coir logs, and silt fences. Wood bark mulch will be used to reduce surface erosion, help retain soil moisture, and promote seed generation of native plants. Standard erosion control measures such as silt fences and/or sand bags will be used to minimize any potential soil erosion.
- Although soil side-cast during construction will be susceptible to some erosion, such erosion will be minimized by placing silt fencing, or other erosion control, around the excavated soil. Excavated soil may be used in the construction project; excess soil will be stored in approved areas.
- Construction will take advantage of previously disturbed areas wherever possible. Soils will be susceptible to erosion until revegetation takes place. Vegetation impacts and potential compaction and erosion of bare soils will be minimized by conserving topsoil in windrows and reapplying after construction and not allowing equipment to drive on once placed. The use of conserved topsoil will help preserve micro-organisms and seeds of native plants. The topsoil will be re-spread in as near as original location as possible. To reduce construction scars and erosion, mulching, seeding, and/or planting with species native to the immediate area. Scarification of compacted soils will occur as necessary to improve revegetation.

## Vegetation and Revegetation

- Construction equipment will be cleaned before entering the park to minimize the transportation 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 nonnative seeds or vegetation.
- Weed control methods (previously approved in the park's 2013 *Invasive Vegetation Management Plan and Environmental Assessment*) such as spraying herbicides and mechanical removal will be implemented to minimize the introduction of noxious weeds. Preconstruction: 1) Spot treat weeds as soon as possible in advance of any ground disturbance, 2) apply a pre-emergent for controlling exotic annual species, 3) apply a post-emergent for exotic perennials, and 4) seed with desirable native species. During construction: 1) conserve topsoil in windrows and cover with weed barrier cloth to prevent weed seeds from contaminating, 2) treat disturbed areas for exotic species. Post Construction: 1) treat new disturbance with a cover crop such as slender wheatgrass, 2) seed disturbed areas with native seed at a rate of 18-20 pounds of pure live seed (PLS)/acre (unless a different rate is identified), 3) selectively treat exotic weeds such as alyssum and cheatgrass.
- A reclamation/revegetation plan will be developed and implemented by NPS staff, FHWA staff, and consultants. Revegetation and recontouring of disturbed areas will take place during, and following construction. 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.
- This project will follow Topsoil Retention/Vegetation Guidelines developed for previous projects within the park (NPS 2002). Any disturbed topsoil will be salvaged and used to restore areas near its original location. Topsoil storage and placement protocols will be followed.

- To increase the chances of success in reestablishing sagebrush communities, local plant stock could be grown in nurseries and then planted post-construction.

#### **Wetlands**

- Mitigation for wetlands destroyed will be done through restoration of disturbed wetlands located within the park at a minimum 1:1 ratio. Wetland restoration will occur through an ongoing separate project which removes road embankment and constructs a viaduct over the Pelican Creek drainage. Wetland mitigation will entail the removal of existing road fill (embankment) used for the present Pelican Creek causeway. Removal of this soil, which acts as an earthen dike across the Pelican Creek wetland, will restore wetland functions such as water flow, infiltration, and habitat value.

#### **Ethnographic Resources**

- The park will continue to work with tribes to document and evaluate the ethnographic resources within the park ascribed with native significance and give protective measures for these resources.

#### **Archeological and Paleontological Resources**

- All contractors and subcontractors will be informed of the procedures to follow in the event of archeological, 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, or paleontological resources. Should construction activity unearth previously unknown historic or prehistoric cultural remains or artifacts, work will be stopped in the area of the discovery and the branch of cultural resources will be notified. In accordance with the Inadvertent Discovery Procedures of the 1993 Road Programmatic Agreement, the cultural remains will be assessed and the Wyoming SHPO notified. If the cultural remains are assessed as significant and retain integrity for the archeological information they may provide, the site will be avoided and protected. If avoidance is not possible, data recovery excavations will be conducted prior to any construction activity resuming in the area. If Yellowstone National Park, with the concurrence of the Wyoming SHPO, determines the artifacts or remains are not sufficient to meet the definition of a National Register eligible site or the archeological information with the site is not significant, all cultural remains will be collected and construction activity may commence with the archeological monitoring. In the event that human remains are recovered, all work on the project will stop immediately, an NPS coroner and the branch of cultural resources shall be contacted immediately, and the stipulations of the Native American Graves Protection and Repatriation Act (25 U. S. C. 3001-3013) shall be followed prior to recommencement of any work, as outlined in The Road Programmatic Agreement.

#### **Historic Structures**

- In order for this bridge and site design to be as compatible with the historic architectural characteristics on the Northeast 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.

#### **Natural Soundscapes**

- Equipment will not be allowed to idle longer than 10 minutes when 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.

### **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.
- 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 FHWA.
- All work will be planned to reduce construction noise to visitors as much as possible by timing activities to avoid noisy activities at night when sound could carry to the Roosevelt Developed Area which includes visitor cabins and employee housing. The use of sound curtains may be employed to help reduce noise from pile driving activities.

### **Wildlife**

- 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 should be designed to allow wildlife that attempt to cross or travel the road to rapidly escape if threatened by on-coming vehicles. This could include short openings in the guardrail, and slopes that allow wildlife to move up- or down-slope to get off the road.
- 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 if 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.
- Construction workers and supervisors will be informed about special status species. Contract provisions will require the potential cessation of construction activities if a species were discovered frequently inhabiting the project area, until park staff can evaluate the situation. This will allow modification of the contract for any protection measures determined necessary to protect the discovery.
- All project-related employees, such as contract and government construction 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.

- Within the proposed construction areas the typical period for nesting birds is between March 1 and August 15. Per the Migratory Bird Treaty Act, no cutting of trees, vegetation clearing, grubbing, or other site preparation and construction activities which could affect nesting birds will occur between those dates unless qualified biologists from Yellowstone National Park survey them prior to any of these listed activities and find no birds present or using the area. Inactive nests will be removed from the existing bridge outside of nesting season.
- Blasting is not anticipated for this job, but if needed it will occur outside of the migratory nesting bird period (between March 1 and August 15) or if a survey for nesting birds finds none in the area.

### **Water Resources**

- Filter barriers, sedimentation ponds, berms, coir logs, and other best management practices will be used to protect existing water sources and maintain turbidity and sedimentation at the lowest practical level during construction activities. A storm water pollution prevention plan and a water quality monitoring plan will be required before implementation of the project. Best Management Practices (BMPs) such as water bladders, sand bags, coffer dams, or sediment curtains, will be used if needed within the river around any in-water work areas, such as abutment and pier removal and placement.
- Silt fencing fabric will be inspected weekly or after every major storm. Accumulated sediments will be removed when the fabric is estimated to be approximately 50% full. Silt removal will be accomplished in such a way as to avoid introduction of fine particle materials into any wetlands or flowing water bodies.
- To minimize possible petrochemical/fuel 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.
- Equipment will not be allowed to operate within the stream/river during critical periods such as during fish spawning (late-May through June). 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 Yellowstone River.
- A Section 404 Permit of the Clean Water Act, and 401 water quality certification will be obtained prior to construction.

# NON-IMPAIRMENT DETERMINATION

## Yellowstone 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 wildlife in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wildlife 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 geothermal resources, vegetation, and wetlands. 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 Yellowstone River Bridge Replacement EA.

## **Geothermal Resources**

The park is a geologically active area that is world-renowned for its geothermal activity, which includes hot springs, geysers, mud pots, and fumaroles.

Within the project area, volcanic rocks, basalt lava flows, and hydrothermally altered areas—including Calcite Springs—can be seen. Hydrothermal areas and small seeps follow a zone of northwest-trending faults and fractures that roughly parallel the Grand Loop Road and Yellowstone River. Hydrothermal features located in the general vicinity of the road corridor at Calcite Springs are created by the movement of hot fluids and gases along fractures and faults that emerge at or near the bottom of the canyon of the Yellowstone River. Hydrothermal features present include fumaroles and springs. The features are located below road grade along the west river bank. Hydrothermal activity and alteration also occur along the road corridor and throughout the area, but they are small and show little activity.

The bridge described in the selected alternative will avoid active thermal areas on the surface. Additional subsurface investigation will occur prior to construction to inform final design and pier locations for the bridge. This investigation will require drill holes approximately 10 to 50 feet in depth. The hot areas discovered during subsurface geotechnical investigations that align with the selected alternative may be avoided by relocating piers, or if they cannot be avoided, pier designs with shallow footings for use in thermal areas will be used. Use of this type of footing will likely avoid changing the dynamics of geothermal processes in the project vicinity. The geologist for the park will be consulted on the process and will have authority to stop drill operations if needed for safety or resource concerns.

While subsurface hot areas do exist beneath the alignment for the selected alternative, including the bridge alignment, there is negligible potential for adverse impact on these subsurface geothermal features largely because: 1) the project has been sited to avoid the most active thermal areas, 2) road realignment is largely a “surface” disturbance that does not result in deep subsurface alterations; and 3) runoff from paved areas will be routed to avoid thermal features. Any ongoing road maintenance activities and visitor or administrative use of the road will be largely confined to “paved areas” and poses negligible risk of adverse impacts to geothermal resources. These risks are likely not be measurable and will not result in any change to any surface geothermal feature.

Thermal design for the road and bridge will not only protect infrastructure components but will avoid disrupting the normal dynamics of thermal features. Thermal design elements will be incorporated as necessary during the final stages of design. Depending on the action, additional compliance may be necessary before these could be implemented. No thermal features have been identified along the road for this alternative and there will be no effects on thermal resources due to the road.

The selected alternative will not adversely alter the geothermal resources along the road. While hot ground has been recorded beneath the existing bridge and on the alignment of the new bridge, thermal design will likely allow for construction of new bridge piers in this area without

impacting the heat source that drives the thermal features of Calcite Springs or other smaller features closer to the project area. The potential impacts of this project are thus limited to heat dissipation from the ground to the air through the bridge piers, and geothermal features in the project area will remain for the enjoyment of future generations. As a result, the NPS has determined that the selected alternative will not result in an impairment of geothermal resources within the park.

## Vegetation

The vegetation in the Tower-Roosevelt area is a complex mosaic of forest, wetlands, meadows, and sagebrush steppe. Roosevelt Lodge and nearby cabins are nestled in an open mature Douglas-fir (*Pseudotsuga menziesii* var. *glauca*) forest, with trees continuing to the south. Stretching to the north and east towards the Roosevelt Corral location, is a mosaic of small stands of trees including both Douglas-fir and lodgepole pine (*Pinus contorta* var. *latifolia*), meadows, and small shrub areas dominated mostly by black chokecherry (*Prunus virginiana* var. *melanocarpa*).

Sagebrush steppe becomes the dominant vegetation type in the vicinity of the Tower Junction location and in much of the project area, with mountain big sagebrush (*Artemisia tridentata* var. *vaseyana*) as the most conspicuous species. These plant communities provide grazing opportunities for bison and other ungulates, which are often found in large numbers in the project area. Small aspen (*Populus tremuloides*) stands and riparian wetlands are found immediately adjacent to Lost Creek. The Yancey's Hole location is on the ecotone between the meadow/sagebrush steppe in Pleasant Valley and a forested wetland dominated by Engelmann spruce (*Picea engelmannii*).

Insufficient facilities and spillover parking lead to a number of adverse impacts on vegetation near roads and developed areas, including compaction, social trail development, trampling, and eventually loss of ground cover, which in turn can lead to increased infestations by non-native plants and noxious weeds. Additionally, existing trail use from both horses and visitors adversely impacts trail edges, leading to churned up mineral soils that can become toe holds for weed establishment.

The selected alternative will construct the bridge and road segment on a new alignment. The new road segment will require removal of mature, intact native sagebrush and Douglas-fir communities. Once the new alignment is finished, the current road segment and bridge will be removed, recontoured, and seeded to reestablish healthy native plant communities. Reestablishment of sagebrush is often a challenge during reclamation projects in this environment, due to the length of time required for establishment.

The selected alternative will have temporary adverse impacts on sagebrush and Douglas-fir communities. Additional geotechnical investigation of subsurface conditions will require truck-mounted drilling equipment accessing areas from within the proposed alignment and associated construction limits or placed via a helicopter. Sagebrush within the proposed alignment will be driven over and will exhibit broken branches and visible disturbance. To reduce impacts to vegetation, areas will be either accessed when ground is frozen or using mats to drive on if ground is saturated. Construction access to both the existing and new bridge sites will disturb 5.4 acres, which will need to be revegetated. In order to construct a fish barrier on Lost Creek and repair erosion damage at the headwall cut on the lower end of the wetland west of the existing road, an additional 1.2 acres of vegetation will be impacted. Total temporary disturbance from the selected alternative will be 6.6 acres. It is estimated that revegetation efforts will not be deemed fully successful for a period of three to five years or longer.

Permanent impacts to vegetation will come from construction of the new roadway and its

associated turnouts. A replacement parking area/turnout for the Wrecker Parking area will require the permanent loss of between one and two acres of sagebrush community. In total, road realignment and parking turnouts will result in permanent loss of approximately 14.1 acres of sagebrush and Douglas-fir communities. Additionally, 2.4 acres of these communities will be lost in the expansion of the Yellowstone River Picnic Area. A new trail from the pullout on the east end of the new bridge will require 1.2 acres of new permanent loss, and a fish barrier and repairs to the Lost Creek headcut and streambank damage will temporarily impact 0.2 acres until it reestablishes in 1 to 3 years. Total permanent impacts to sagebrush and Douglas-fir communities from this alternative will be 17.7 acres. Total permanent plus temporary impacts will equal 24.3 acres.

Rehabilitation of the existing roadway (removal of road asphalt, road base material, and recontouring of topography) will include 3.9 acres on the west side of the bridge and 2.7 acres on the east side, for a total of 6.6 acres of land disturbed but restored to natural condition. As restoration is a difficult process, and weeds are difficult to eradicate once established, it should be noted that restoration can take years to be successful. When the existing road is removed, the old roadway scar will be visible for a number of years. Restoration actions are expected to take 3-5 years after construction is complete. The net loss of sagebrush and Douglas fir vegetation will result in inconsequential permanent impacts, given it represents about 0.7% of the Yellowstone River drainage habitat located within one mile of the bridge site.

The selected alternative will result in the temporary loss of 6.6 acres of sagebrush and Douglas fir vegetation communities, and 17.7 acres of permanent loss of these vegetation types. The net loss of sagebrush and Douglas fir vegetation will result in inconsequential permanent impacts, given it represents about 0.7% of the Yellowstone River drainage within one mile of the bridge site. As a result, these plant communities will continue to be present for the enjoyment of future generations, and NPS has determined that the selected alternative will not result in an impairment of Vegetation resources within the park.

## **Wetlands**

Wetlands within the 148.6 acre survey area for this project (including 1.45 miles of linear roadway) included a total of 67 wetlands (8.615 acres), including the Yellowstone River. Within the Cowardin hierarchical classification (Cowardin et. al. 1979), four systems were found: palustrine forested (PFO), palustrine scrub-shrub (PSS), palustrine emergent (PEM), and riverine (R). Each classification exhibited slightly different water regimes.

Forty-four of the 67 wetlands identified were classified as PEM. The palustrine wetlands within the Yellowstone River Bridge study area serve the following functions to the Greater Yellowstone Ecosystem: temporary surface water storage, water filtration and sediment retention, nutrient storage and transformation, shoreline stabilization and retention, and habitat for fish, waterfowl, amphibians, reptiles, and other wildlife.

Notable within the survey area was one thermally influenced wetland (labeled YRB\_007 in the full report) located under the current Yellowstone River Bridge just at the edge of the Yellowstone River. Thermally influenced wetlands are rare in the park and extremely rare in the National Park System. In addition to the wetlands with developed organic soil, there were six other wetlands noted for their highly intact plant communities across the survey area.

In the selected alternative, the road alignment was designed to avoid all scrub-shrub wetlands near the proposed route. In areas where fill material is needed for constructing the road prism, sediment fencing and other erosion-control best practices will be used to avoid temporary or permanent impacts to nearby wetlands.

Construction of a temporary work bridge, access roads, and staging areas will affect 0.09 acres

of PEM wetlands from river shore disturbances below the existing bridge, temporarily increasing turbidity during the three-year construction period. Turbidity and sediment can settle on wetland vegetation, stressing or reducing plant density depending on the depth of sediments accumulated. While there will be localized impacts to wetlands while these activities are occurring, these activities will be complete within a few weeks, at which point impacts will cease. In addition, increased turbidity will not have lasting effects on wetlands as the next snowmelt cycle, typically in May and June annually, will cause high water to flush built up sediment from these wetland areas.

The selected alternative will not result in the permanent loss of wetlands, and no wetland mitigation will be required. Instead, approximately 0.2 acres of wetlands in the Lost Creek drainage will be reestablished due to removal of a fill slope along the existing road, which is encroaching into Lost Creek. When the road is re-aligned, this encroachment will be eliminated, resulting in a very small increase in wetland acreage and associated functions and values in the project area.

All construction activities near wetlands will be confined to the smallest area necessary to complete the work. There will be no permanent loss of wetlands and, thus, they will be present for the enjoyment of future generations and the selected action will not impair park wetlands.

### **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. 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

**Page 58 of EA, Paragraph 2,** “While there would be some adverse effects on approximately 0.08 acres of wetlands during the three-year construction period,…”

Change acreage amount to “0.09 acres of wetlands”

# RESPONSE TO PUBLIC COMMENTS ERRATA

This EA was released for public review from February 14, 2020 to March 15, 2020. 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 associated Native American tribes.

Copies of the document were posted on the NPS PEPC website at <http://parkplanning.nps.gov/yrb>. A total of 60 pieces of correspondence were received that included 198 substantive comments. Substantive comments were condensed into the following concerns, with a response to each provided below.

## **Resource Impacts**

**Concern Statement** – Disturbance of new land from a new road alignment, staging areas, parking areas, and picnic area expansion should be kept to the absolute minimum necessary.

**Response** – Minimization of impacts will occur by ensuring that no construction, equipment use, or stockpiling or staging of equipment occurs outside of the project limits. Further, the new road alignment will be approximately 0.5 miles shorter than the existing road, which will be rehabilitated once removed, with the goal of reconstructing the natural spacing, abundance, and diversity of native plants, using native species. This project will follow Topsoil Retention/Vegetation Guidelines developed for previous projects within the park (NPS 2002). Any disturbed topsoil will be salvaged and used to restore areas near its original location. To increase the chances of success in reestablishing sagebrush communities, local plant stock will be grown in nurseries and then planted post-construction.

## **Water Quality**

**Concern Statement** – Concern about debris falling into the river from bridge demolition and reconstruction.

**Response** – The bridge will be removed in sections or pieces, and confinement techniques (e.g., nets, tarps, or other best practices), will be employed during the deconstruction of the existing bridge. By using these mitigation measures, the NPS expects no to minimal debris to enter the river.

## **New Disturbance and Impacts to Vegetation**

**Concern Statement** – The area is heavily impacted by invasive weeds, the most serious of which is cheat grass. A potential for massive invasive weed expansion could occur if not managed aggressively. Ground impacted by past construction activities that have become heavily infested by cheat grass monocultures should offer lessons learned that should be carefully considered for this project.

**Response** – Weed control methods (previously approved in the park's 2013 Invasive Vegetation Management Plan and Environmental Assessment) such as spraying herbicides and mechanical removal will be implemented to minimize the introduction of noxious weeds. The following steps will also be used. Preconstruction: 1) Spot treat weeds as soon as possible in advance of any ground disturbance, 2) apply a pre-emergent for controlling exotic annual species, 3) apply a post-emergent for exotic perennials, and 4) seed with desirable native

species. During construction: 1) conserve topsoil in windrows and cover with weed barrier cloth to prevent weed seeds from contaminating, 2) treat disturbed areas for exotic species. Post Construction: 1) treat new disturbance with a cover crop such as slender wheatgrass, 2) seed disturbed areas with native seed at a rate of 18-20 pounds of pure live seed (PLS)/acre (unless a different rate is identified), 3) selectively treat exotic weeds such as alyssum and cheatgrass.

Prior to construction, NPS staff, FHWA staff, and consultants will develop a detailed reclamation/revegetation plan with the overall goal of creating a self-sustaining, diverse vegetation community composed of species native to the park in sufficient species density and diversity to closely approximate natural, undisturbed vegetation potential. The plan will specify short-term (1-2 years) and long-term (5 years) reclamation goals and success criteria.

**Concern Statement** – It is critical that time prior to and after construction be dedicated to control of weeds and establishing native vegetation. There are few examples of previously disturbed areas being fully restored to pre-development vegetation conditions, so minimizing any new disturbance should be a top priority. Leaving existing facilities are much preferable than creating new ones and then trying to rehabilitate the disturbance areas.

**Response** – Construction staging for the selected action (alternative B) will occur within the area of the new road alignment, the proposed pullouts, the picnic area, and the proposed parking areas at each end of the replacement bridge. The NPS recognizes that revegetation efforts take time to be successful, and that complete restoration of natural conditions (for example, no non-native plants are present) is not always realistic. A reclamation/revegetation plan will be developed and implemented by NPS staff, FHWA staff, and consultants with the overall goal of creating a self-sustaining, diverse vegetation community composed of species native to the park in sufficient species density and diversity to closely approximate natural, undisturbed vegetation potential. There have been many road-realignments and successful revegetation efforts in the park. In some cases, success is not defined as 100% restoration of native species. Given the current presence of weeds in the project area, it's likely that there will be some weeds in the project area well after construction and restoration are complete; however, as noted on page 45 in the EA, these impacts would be visible for a number of years and restoration efforts are expected to take 3 to 5 years after construction in complete to be successful.

### **Wildlife and Wildlife Habitat**

**Concern Statement** – While increasing the size of the Yellowstone Picnic Area, adding parking, pullouts, and improvements to the road would help visitors, prime wildlife habitat for bears, bison, and bighorn sheep would be impacted. Bison and other large wildlife's continued use of the bridge for crossing over the Yellowstone River during construction is a concern.

**Response** – As noted in the EA on pages 8 and 9, there will be no permanent loss of key wildlife habitat, including prime habitat for ungulates and grizzly and black bears. Wildlife that commonly use the project area are usually tolerant of human presence, so long as visitors maintain safe distances. Ungulates, for example, are frequently observed grazing within 25 yards of the road. Bears are sometimes observed. Strict enforcement of food storage and disposal procedures at the construction sites, the contractor housing camp, and the picnic area will minimize the potential for bears to obtain food. If an animal carcass is observed within the project area, NPS bear management staff will be notified and the carcass will be moved in order to reduce the potential for human-bear conflict.

Bighorn sheep and bison are often observed in the area east of the Yellowstone River Bridge. They are relatively tolerant of human presence and are expected to continue to use these areas during construction activities, though some individuals may be displaced from the immediate area while construction equipment operates. While some localized displacement of sheep and bison may occur, there are many nearby areas that offer similar habitat, grazing opportunities, access to water, as well as cover and shelter.

Wildlife will likely continue to use the existing bridge for crossing the Yellowstone River during construction. The new bridge will have bigger sidewalks and wider lanes, meaning that if wildlife use the new bridge, vehicles will have more room to maneuver around them, which improves safety for wildlife and motorists.

### **Costs**

**Concern Statement** – None of the proposals give an estimate of what it would cost. It is difficult to compare which plan is the best, without the costs of each.

**Response** – Alternative B (selected action) is anticipated to cost \$37-\$42 million, and alternative C \$40-\$46 million. The increased cost of alternative C is mostly due to working in a confined area while allowing traffic to continue to flow. Deliveries of materials take longer, movement of construction equipment is more restricted, less space is available for staging of materials and equipment, and additional traffic control is needed. All of these lengthen the duration of construction activities and require more people to do the job safely, raising the cost of alternative C.

### **Design Elements**

**Concern Statement** – Parking should be added on the main road near the picnic area as visitors often stop in this area to watch big horn sheep or use the trails. Consider expanding the width of the bridge to make the park more bike friendly. Please incorporate bio-swales at both ends of new bridge to capture runoff from storm events from the bridge. Also, consider using Ultra-High-Performance Concrete (UHPC) on the new bridge.

**Response** – Numerous design elements have been incorporated to improve visitor access and visitor safety. A new parking area in the vicinity of the Yellowstone River Picnic Area will be constructed with a capacity of 6-10 cars and visitors who wish to stop and watch big horn sheep or use the trails can use this parking area. The replacement bridge and road will have a paved width of at least 30-feet, consisting of two 11-foot wide lanes and two 4-foot shoulders. On the bridge, raised sidewalks of five or six feet wide will also be added beyond the shoulders for pedestrians. No dedicated bike path is being designed as part of this project, but the improvements described above will improve safety for pedestrians, bicyclists, and motorists in the area. Swales will be constructed at both ends of the bridge to allow stormwater runoff from the bridge to percolate into the soil prior to reaching the Yellowstone River. Other design elements, such as concrete, will be determined by engineers as the design progresses.

**Concern Statement** – Please make the Yellowstone River Bridge as aesthetically appealing as possible for motorists, bicyclists, and pedestrians.

**Response** – Final design of the bridge is not complete, though the replacement bridge will be designed to fit with the overall character of Yellowstone's road system. It will meet current FHWA engineering standards for longevity and safety. It will likely have elements common to other bridges in the park such as exposed concrete and stone elements. The appearance will

be simple, so as not to distract from nearby natural features, and the colors of materials will complement natural surroundings.

**Concern Statement** – The new parking areas will likely be overrun with people, who will use the bridge to look down at the rushing Yellowstone.

**Response** – Parking areas will be constructed at each end of the replacement bridge. These will accommodate about 12-16 vehicles each to ensure parking availability off the main roadway. These spaces are anticipated to be used by visitors wanting to hike, or fish along the Yellowstone or Lamar Rivers, for those using the walkways of the bridge to view the canyon and river, and for viewing scenery or wildlife in the area. In total, the project will roughly double the number of parking spaces in the project area, which will better accommodate recent visitation levels and, therefore, it's not expected that the parking area will be overrun with people.

### **Visitor Use and Traffic Control**

**Concern Statement** – Delivery trucks, septic system pump-out trucks, supply trucks and propane trucks all need to be able to fulfill their runs to nearby communities in a timely manner. A four-hour delay is not acceptable.

**Response** – The selected action will not require any long delays during construction. During most of the construction process, visitors and construction workers/equipment will be separated. When the new alignment is complete, traffic will be rerouted onto it. At that point, removal of existing road and bridge will be completed. Very few delays are anticipated, though some, approximately 15-30 minutes, may occur to make access points for equipment as during the first construction season.

**Concern Statement** – One commenter expressed concern over the surfacing material used for the Yellowstone River Picnic Area.

**Response** – A decision has not yet been made for the surface material to be used in the Yellowstone River Picnic Area. It is expected to be an area of high visitor use, with frequent automobile traffic in and out. Given the expected volume of traffic and visitors, the surface will likely be asphalt.

**Concern Statement** – Concern was expressed about the rehabilitation of Wrecker Pullout and access to the confluence of the Lamar and Yellowstone Rivers. Some commenters stated the need for bus parking south of the road, for educational programs supported by the park. Ideally, this parking would be separated from the picnic area parking to eliminate competition for spots.

**Response** – A parking area to accommodate the existing use for Wrecker Pullout will be constructed as part of this project. The parking area is generally described in the preferred alternative section (chapter 2) of the Environmental Assessment. As stated on page 21 of the EA there will be dedicated parking for at least four buses.

### **Maintenance Costs**

**Concern Statement** – It appears the preferred alternative would shorten the overall road length which means less road to maintain in the future.

**Response** – While the selected action will result in about 0.5 mile less road length, the road width will increase from 22-24 feet wide to the park road standard of 30-feet, throughout the

project area. When length versus width calculations are considered, the project will result in negligible change in the total amount of paved or graveled surface in the park.

### **Visitor Experience and Economic Impacts**

**Concern Statement** – Communication with park concessioners and businesses should occur as early as possible, because of potential impacts to planning and operating efforts. The economy of gateway communities is heavily dependent on tourism, and it is critical for visitors and guide services to have access to the Lamar Valley area because long delays could negatively impact community economies. Delays and closures are understandable but consider the impact early morning closures might have on local wildlife watching businesses.

**Response** – Trailhead parking and pullouts within the project area will be closed for the duration of construction. Visitors can still access trails in the vicinity, such as the Garnett Hill Trail, but in some cases, the hikes will be longer, since the construction area must be avoided. Vehicular access to Lamar Valley from Gardiner and Cooke City/Silver Gate will not be affected, except for occasional, short delays, lasting no more than 30 minutes. The delays will be timed to cause minimal disruption of traffic, while balancing worker safety and other important factors.

### **Visitor Safety**

**Concern Statement** – The structural integrity of the existing bridge seems to be poor – should it be in use today? Some commenters noted that increasing roadway width could make roads less safe because of driver tendency to increase speed when sightlines improve.

**Response** – The safety of visitors, park staff and partners are of the utmost importance to Yellowstone National Park. Federal Highways Administration engineers conduct a safety inspection of this bridge annually to determine if measures such as weight restrictions are needed. At present there has been no need to restrict traffic or impose load restrictions. That said, the bridge is nearing the end of its useful life, which is the reason for the proposed replacement. If safety issues are discovered prior to bridge replacement, restrictions will be imposed, though the likelihood of this situation is low.

Because the geometric alignment of the current road east of the bridge does not meet current FHWA standards for design speed, changes to the existing alignment have been proposed. Ultimately, implementation of the selected action will bring the roadway in this area up to standard for design speeds, which in turn, will improve driver safety.