

FINDING OF NO SIGNIFICANT IMPACT
Canyon Junction to Tower Junction Road Improvement
07/02/02

YELLOWSTONE NATIONAL PARK
IDAHO/MONTANA/WYOMING

MANAGEMENT RECOMMENDATIONS AND APPROVAL

Recommended:

_____	_____
Superintendent Yellowstone National Park	Date

Approved:

_____	_____
Regional Director Intermountain Region	Date

FINDING OF NO SIGNIFICANT IMPACT
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In accordance with the provisions of the National Environmental Policy Act of 1969 and the regulations of the Council on Environmental Quality, 40 CFR 1508.9, the National Park Service prepared an Environmental Assessment: *Canyon Junction to Tower Junction Road Improvement*. The project is one of many phases of road refurbishment identified in Yellowstone National Park's *Parkwide Road Improvement Plan* (approved June 1992). Resurfacing, restoration, rehabilitation, and reconstruction, of the road are necessary to correct road deterioration and numerous safety hazards. An Environmental Assessment (EA) was released to the public in September 2001. Four alternatives were considered: the preferred alternative to reconstruct the road at a 24' pavement width, an alternative to reconstruct the road at a 30' pavement width, an alternative to reconstruct the road at a 20' pavement width, and a no action alternative.

PREFERRED ALTERNATIVE

The proposal (Alternative A, preferred alternative) is to resurface, restore, rehabilitate, and reconstruct 29.3 kilometers (18.4 miles) of the Grand Loop Road between Canyon Junction and Tower Junction and to widen the road from its existing 5.8-6.7 meters (19-22 feet) to a 7.4 meter (24 foot) paved top width. Curve widening and guardrail offsets will increase paved width by up to an additional five and one half feet. Curve widening and guardrail offsets would occur predominately from Dunraven Pass to Mae West curve. Curve widening in this area would be applied to approximately 42 of the 65 curves in this stretch of road. The existing alignment would be followed except for a shift of the road centerline near Calcite Springs. In this area the roadway would be shifted away from the existing parking area to improve safety by separating the parking area from the road. Approximately 0.4-kilometer (0.25-mile) of the road directly adjacent to the Calcite Springs parking area would be shifted approximately 30-61 meters (100-200 feet) west of its current location. Improved drainage structures and pullouts will also be included in the project. The widened road is projected to help meet future growth predictions in traffic volumes beyond the year 2010 by maintaining Level of Service D (see page 51 in EA). Bicycle traffic will not be promoted on this section of road. Reestablishment of a more natural landform and better revegetation on existing cut and fill slopes will be accomplished by reducing the steepness of these slopes where possible.

The existing pavement will be milled and stockpiled for use within the new pavement structure. Areas with roadway soils of poor quality will be repaired by excavating these materials and replacing them with better-draining aggregates. New base material will be imported or obtained from cuts elsewhere on the project. The roadway will be widened by excavation of cut slopes and or addition of embankment fill. Wherever possible, roadway widening will be confined to one side, with the centerline shifted accordingly to avoid important natural or cultural features.

A standard fill slope ratio of 1:4 will generally be used; however this slope will be steepened in some areas to 1:3 to reduce resource impacts. Most cut and fill slopes will be in the 3- to 6-meter (10- to 20-foot) range, with maximum cuts of about 23 meters (75 feet) in height and maximum fills of about 9.2 meters (30 feet) in depth.

Approximately 800 meters (2,625 feet) of retaining wall would be used in about 12 locations to reduce disturbance in cut and fill situations. In intermediate height areas a 0.9 to 2.4 meters (3 to 8 feet) high rockery wall or a soil-nail wall will be used.

Existing log guardrails will be replaced with w-beam made of Corten steel or masonry guardwalls, similar to those installed on portions of the East Entrance road. Additional sections of new guardrail would be added to existing guardrail area to improve safety of the area for a total of approximately 1,600 meters (5,249 feet).

The Tower Creek bridge will have the dry-laid stone wall at the northeast corner repaired. The bridge will not be widened.

Approximately 195 culverts along the road will be affected by the road project. Most will be replaced and associated masonry headwalls will be removed and reconstructed retaining their historic appearance. New culverts will be added where necessary to correct drainage problems. Pipe culverts will be replaced and lengthened to

compensate for a wider roadway. Culvert replacement and headwall reconstruction will be in keeping with the stipulations agreed upon by the Advisory Council on Historic Preservation (ACHP), National Park Service, and Wyoming State Historic Preservation Officer (SHPO) in the 1992 programmatic agreement (Roads PA).

About 130,000 metric tons of aggregate material will be used in this road project . In addition, about 25,000 metric tons of select borrow will be used

Areas that will be considered for disposal of excess excavated material would be at the Grebe Lake pit (up to 6,000 cubic meters or 7,848 cubic yards), Canyon employee's ball field area (up to 30,000 cubic meters or 39,239 cubic yards), Frog Rock pit (up to 30,000 cubic meters or 39,239 cubic yards), and the now-abandoned Canyon cistern (up to 1000, cubic meters or 1,308 cubic yards). The total net quantity of material for disposal will be about 40,000 cubic meters (52,000 cubic yards).

A new access road (approximately 300 meters (984 feet) in length) will be constructed to access the Grebe Lake pit. Use of the current access road is impacting existing thermal features adjacent to and spanning the existing road. This new road will impact approximately 0.28 hectares (0.7 acres) of mature lodgepole pine forest.

The project will take about six years to complete, and is presently planned for two construction phases. Each phase will entail closing the road completely for a period of one to two years.

Approximately 43.7 hectares (108 acres) of soils and vegetation will be disturbed along the roadside during road reconstruction. The large cliff face at Overhanging Cliff will have a small portion of the cliff face removed to allow for the wider road. Blasting could be necessary to remove approximately 1,000 to 2,000 cubic meters (1,196 to 2,392 cubic yards) of material.

Six rare plant sites totaling 750 square meters (8,073 square feet) will be affected along the road corridor.

No hydrothermal areas will be impacted by this road project.

The total area of wetland impact will be approximately 0.39 hectares (0.96 acres).

There will be no long-term adverse impacts on air quality or visibility in the park or region due to this project.

Approximately 35 to 38 hectares (86 to 94 acres) of potential wildlife habitat adjacent to the road will be impacted by construction.

A short-term impact on some nesting birds could occur due to tree cutting activities that may occur prior to July (the typical end of their nesting period). The effect to these birds would be adverse but minor in scope. Blasting restrictions would be used to mitigate adverse effects to nesting peregrine falcons.

It is possible that roadway reconstruction at the Rainy Lake wetland will result in partial loss of this site as amphibian habitat. There are no other known chorus frog breeding sites in the Tower-Tower Fall area.

There is the potential for increasing stormwater runoff due to an approximate 17 percent increase in pavement area over existing road conditions. It is not anticipated that this project would have anything more than a negligible increase in sediment loading where the road parallels Antelope Creek for about 3.6 kilometers (2.25 miles).

Approximately 13,000 whitebark pine saplings and trees will be removed from the road edge to allow for road widening and roadway improvements.

There will be an increased risk for vehicle-animal collisions and vehicle-caused, large mammal road-kill mortality as a result. Under this alternative a slight increase in average vehicle speed, regardless of the posted speed limit, would be expected. Because of this, a small "Incidental Take" of grizzly bears, or wolves could potentially occur.

The project may affect, and is likely to adversely affect grizzly bears or gray wolves. The project may affect, but is not likely to adversely affect lynx. The project will have no effect on bald eagles or whooping cranes.

The Dunraven Road, along with all park roads, is in a Grizzly Bear Management Situation 1 area. Management Situation 1 calls for a high level of protection of bears. This project does not change how the park manages people (or bears) in the road corridor. All current management activities are focused on minimizing impacts of people on bears would continue and to continue to be evaluated for effectiveness.

Data recovery efforts have been completed, per the terms of the Roads Programmatic Agreement, to mitigate the impact of road widening to a historic archeological feature of the site of the Tower Fall Soldier Station and tourist auto camp (Site 48YE163).

The park will continue to work with the WYSHPO regarding the specific design near Calcite Springs to mitigate any impacts of shifting the centerline at this point and its impact to the Grand Loop Road (Site 48YE520).

Some short-term impacts would occur to visitors unable to access the Dunraven road and its associated features during some years of the construction projects. Additionally the Tower Fall campground would need to be closed during some portions of the second phase of the construction project.

Reconstruction of the Dunraven Road improvement project is scheduled to begin in the fall of 2002 or spring of 2003. It is anticipated that the project would be completed during the summer of 2008.

ALTERNATIVES CONSIDERED

The environmental assessment analyzed several alternatives, including the preferred alternative described above and a no-action alternative. Under the no-action alternative, no major road reconstruction would occur in the Canyon Junction/Tower Junction area in the near future. Existing use and maintenance of the road and ancillary features would continue. Maintenance activities such as pothole patching, periodic chip-and-seal coat applications, and removal of rockfall and slumping debris would continue. In some roadway sections regular road maintenance would be inadequate because the road has deteriorated to the point where substantial improvement has become necessary. Road maintenance activities would require an increasing proportion of park funds because FLHP funds would not be available. Mid summer closures as occurred in 1998 would be necessary.

The environmental assessment also examined several other alternatives during the planning process, which are described below.

- A variety of alternatives were considered early in the project to evaluate portions of the road that had notable natural/cultural resource and safety concerns such as wetlands and unstable slopes, traffic congestion, and archeological sites. Alternative considerations including re-routes, and re-designs at Calcite Springs, Overhanging Cliff, Tower Fall, and Dunraven Pass were explored. Separating vehicle flow from pedestrians and avoiding impacts to large trees and wetlands were also considered.
- Overlaying the existing pavement structure at its existing width with a new layer of asphalt would not correct the problems of improper base material to allow proper drainage that would reduce frost heaves and cracking of the pavement due to freeze-thaw action, and heavy vehicles and improper drainage. Safety issues, such as narrow road, no shoulder, and no recovery zone, would not be addressed.
- Close the road to private vehicles and leave open for mass transit vehicles. All private vehicles would be restricted from using the Dunraven Road during June, July, and August. Vehicles over 6.7 m (22 feet) in length could be restricted during the entire visitation season. It is assumed that the proposed visitor transportation system service would be used by approximately 25 percent of the visitors who would use the road if no restrictions were in place.
- Make the road a one-way road at its existing width. The roadway would operate as a one-lane, one-way northbound or one-way southbound, road at its present width with a wide shoulder for passing and use by bicycles. Visitor information would be provided advising visitors of the restriction to one direction of traffic. Emergency vehicles might be allowed to travel against the flow of traffic.
- Reconstruct roadway at its existing width and restrict vehicles over 6.7 meters (22 feet) and provide a shuttle system. Private vehicles over 6.7 meters (22 feet) in length would be restricted on Dunraven Road for the entire visitation season. A visitor transportation system would provide access to the Dunraven Road corridor.

Each of the above alternatives was dismissed from further consideration because they either unsatisfactorily addressed project objectives and/or no dedicated funding was available to implement the alternative. In the case of overlaying the road at its existing width and correcting problems associated with the road, National Park Service policy only allows for a maximum 5 percent increase in pavement area and would not allow for additional improvements.

As more fully described in the environmental assessment, three additional alternatives were developed and examined:

- Alternative B would reconstruct the existing roadway alignment to a 9.2 meter (30-foot) pavement width with no use restrictions.
- Alternative C would reconstruct the existing roadway alignment to a 6.0 meter (20-foot) pavement width, with a 6.7-meter (22-foot) vehicle length restriction.
- Alternative D is the no-action alternative in which no major road reconstruction would occur in the near future.

These alternatives were not selected because they either had the potential to create more adverse impacts or did not effectively address all the objectives. Alternative B would potentially disturb an unacceptable amount of adjacent land and habitat, due to the steep and winding topography of the upper portion of the road. Major blasting would be required to widen the road template in the area of Overhanging Cliff, and increased impacts would be associated with widening the road in the area of the cultural resource site of the Tower Soldier Station and in the Roosevelt area. Wetland impacts would increase by about 0.1 hectare (0.25 acre) over the preferred alternative. The number of whitebark pine trees impacted by the project would increase over the preferred alternative by 5,356 to 6,024 trees.

Alternative C was not considered to be a desirable alternative by many of the staff involved in the design of the project. Park staff believed a major reconstruction of the road at its current width would not address problems such as rockfall catchment areas, recovery zones, and because of the cost of reconstruction, wider travel lanes should be incorporated.

Alternative D did not address the problems and expense associated with maintaining a road that has vastly deteriorated to a point that ever increasing amounts of money are required to keep the road only passable for summer visitation traffic. Improper road base materials would not be replaced. Frost heaving and cracking of the pavement would continue to occur. Safety concerns regarding the narrow width of the road would not be addressed.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that “[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed NEPA’s Section 101:

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

Given the above criteria, Alternative A was determined to suitably fit the balance that is required to be met as the environmentally preferred alternative. Alternative A best preserves and enhances cultural and natural resource over the long-term. Road reconstruction to a 24-foot width best meets the national environmental policy expressed in NEPA (Sec. 101 (b)) to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.

- Alternative D, the no Action Alternative, would not strike the balance between public safety and preservation and repair of cultural features. Alternative D would also allow the traffic Level of Service (LOS) to degrade to LOS E due to the expected growth in traffic by 2010.
- All of the action alternatives (Alt. A, B, C) would create some levels of change to the immediate roadside conditions.
- Alternatives A and C would also have additional paved width due to curve widening on many of the sharper curves. Increased paved width of 0.6 to 0.8 meters (2.0 to 2.6 feet) would be expected on 42 of 65 curves.
- The disturbance created by the clearing limits necessary for a 6.0-meter (20-foot) Alternative C includes the same additional four-foot offset for guardrails from the fog lines, curve widening, and additional width for improvements to drainage as in Alternative A and B.
- As the narrowest road width option of any of the action alternatives, Alternative C does not provide a needed level of public safety.
- The road width standard typically called for within the park is 9.2 meters (30 feet) as described in Alternative B. However for the Dunraven Road segment, this width was considered to be difficult to achieve without causing unacceptable impacts to cultural and natural features. The difference with this road segment compared to most others in the park was the very steep terrain and rock cliffs and lesser traffic levels than other park roads. Aside from increasing road width, other methods to provide for public safety were identified.

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

Impacts that may be both beneficial and adverse: Approximately 43.6 hectares (107.8 acres) of new disturbance would occur. This disturbance would impact approximately 40.4 acres of area in whitebark pine zones. Approximately 0.39 hectares (0.96 acres) of wetland impacts would occur. Air quality would be degraded in the short-term due to dust and exhaust caused by construction equipment. Safety of visitors and employees is expected to improve due to wider lanes, smoother driving surface, and additional recovery zones.

Road maintenance costs are expected to decrease, as poor quality road base materials and poor drainage along this road segment would be improved.

Degree of effect on public health or safety: A decrease in vehicle accidents may be achieved by maintaining ten-foot wide travel lane widths and adding two-foot wide paved shoulders. Current variable-radius curves will be realigned to meet standards needed for the design speed of the road. W-beam style guardrail meeting FHWA crash standards will replace the existing log guard rail that has never been tested by FHWA. Sight distances for many portions of the roadway will be improved by the removal of roadside vegetation and changes to vertical and horizontal curves of the road. The current potholed and cracking surface of the road surface will be replaced with a smooth asphalt surface which will eliminate the need for motorists to “dodge” potholes.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: As described in the environmental assessment, prime farmlands and wild and scenic rivers will not be affected. Approximately 0.39 hectare (0.96 acre) of wetlands will be removed or impacted as part of this project. The largest portion of this (0.2 hectare/0.49 acre) will occur due to the expansion and re-configuration of the parking area at Dunraven Pass trailhead. Approximately 16.3 hectares (40.4 acres) of area in whitebark pine zones will be affected. In this area it is estimated that approximately 14,600 whitebark pine trees (the pine nuts are a key grizzly bear food source), made up of approximately 9,000 seedlings, 4,300 saplings, and 1,300 cone-bearing trees. Many of the seedling and sapling sized whitebark pine trees would not ever be expected to reach cone-bearing size. Historic resources along the road would not be adversely affected. A portion of one site, 48YE163 Tower Fall Soldier Station would be impacted by road widening, and data recovery has been completed per the terms of the Roads Programmatic Agreement to mitigate the impact.

Degree to which effects on the quality of the human environment are likely to be highly controversial: The controversial aspects of this project stem mostly from perceived changes to the roads character, and impacts to

grizzly bears and whitebark pine trees. Of the 194 public comments received, 8 were from agencies or groups and 186 from individuals. Of the comments, three were neutral, four liked the preferred alternative, and 187 preferred to see a project that did not increase the footprint of the existing roadway. Additionally many of the comments suggested not removing whitebark pine trees, due to the value of the pine nuts as grizzly bear food. It was perceived by the public that the park is reconstructing to a wider width to accommodate large recreational vehicles. Presently seven percent of the traffic on the road is longer than 22 feet in length.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: There were no highly uncertain, unique or unknown risks identified during either preparation of the environmental assessment or the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The preferred alternative neither establishes a National Park Service precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: Impacts of the preferred alternative identified in the environmental assessment would be mitigated by those items listed above. With the mitigation measures implemented there would be no new cumulative impacts to unique or important features or resources within the park.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: As described in the environmental assessment, an intensive archeological inventory of the area was conducted. In accordance with the Roads Programmatic Agreement, data recovery was completed to mitigate possible impact to a feature of the Tower Soldier Station historic archeological site (48YE163). No other National Register eligible prehistoric or historic archeological site or significant historic road feature will be impacted by the proposed action. Consultation with the 24 Native American tribes affiliated with Yellowstone National Park was conducted in 1999, 2000, and 2001. No known ethnographic resources have been identified in the area.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: With the implementation of the mitigation measures listed above the Fish and Wildlife Service has concurred that the project would have no effect on the whooping crane (*Grus americana*). The Fish and Wildlife Service also concurred that the project may affect, but is not likely to adversely affect Canada lynx (*Lynx canadensis*) and bald eagle (*Haliaeetus leucocephalus*). The Park consulted with the Fish and Wildlife Service on the effects to grizzly bear (*Ursus arctos horribilis*) and gray wolf (*Canis lupus*). The project may affect, and is likely to adversely affect the grizzly bear and gray wolf. A biological opinion was received from the U.S. Fish and Wildlife Service on July 2, 2002 and is attached. An incidental take statement was included in the biological opinion and allows for a direct take of two grizzly bears and two gray wolves as a result of the implementation of the proposed alternative. The park, during the formal consultation with the U.S. Fish and Wildlife Service, worked to minimize the impacts to these two species. Terms and conditions include removal of carrion along the road prior to road opening and during visitor use periods, planting of whitebark pine seedlings among others.

Whether the action threatens a violation of federal, state, or local environmental protection law: The preferred alternative violates no federal, state, or local environmental protection laws.

In addition to reviewing the list of significance criteria, Yellowstone National Park determined that implementation of the preferred alternative will not constitute an impairment of the park's resources and values. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, the agency and public comments received, and the professional judgement of the decision-maker in accordance with the National Park Service's Management Policies, 2001 (December 27, 2000). As described in the environmental assessment, implementation of the preferred alternative will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Yellowstone National Park; (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

PUBLIC INVOLVEMENT

The completed environmental assessment was made available for public comment during a 60-day period ending November 23, 2001. A total of 194 comments were received. Comments that came in during the public comment period and during the five business days following equaled 142 responses, and were received from various agencies, and the public. After the comment period closed, an additional 52 comments were received on the project. The EA or notification of EA availability was sent out to approximately 270 addresses (other than NPS staff). A press release was also issued on the availability of the EA. A summary of comments for this EA is attached.

No new major issues were raised by the public comments that were not addressed in the EA.

CONCLUSION

The National Park Service proposes to reconstruct the road segment between Canyon Junction and Tower Junction to a 7.2-meter (24-foot) pavement width. Depending on funding, the work would begin as early as Fall 2002.

The proposed reconstruction of the Canyon Junction to Tower Junction road segment is not a major federal action that normally requires the preparation of an Environmental Impact Statement (EIS). Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed on or eligible for listing on the National Register of Historic Places, known ethnographic resources, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental law.

There are no federally listed plant species that occur in the park. Approximately 44 hectares (108 acres) of soils and vegetation will be disturbed along the roadside during road reconstruction.

There would be no effect on hydrothermal resources. Wetland area lost will be approximately 0.39 hectares (0.96 acres). Wildlife would be temporarily displaced by construction activities. No significant increases in wildlife mortality are anticipated though an incidental take of two grizzly bears or two gray wolves has been written into the incidental take statement of the biological opinion provided by the U.S. Fish and Wildlife Service for this project. There would be no effect on whooping cranes, or bald eagles. This alternative is not likely to adversely affect the continued existence of the grizzly bear, Canada lynx, or gray wolf populations. Effects on air quality would be temporary in nature and minimized through adherence to all applicable regulations. The Wyoming Historic Preservation Officer and the Advisory Council on Historic Preservation concur that no National Register eligible historic properties or ethnographic resources would be adversely affected. There would be no adverse impact on public health and public safety would be improved.

Based on the foregoing, it has been determined that since the project does not constitute a major federal action significantly affecting the quality of the human environment, an EIS will not be prepared.

SUMMARY OF COMMENTS
Canyon Junction to Tower Junction Road Improvement
Environmental Assessment

A total of 142 responses on the Canyon Junction to Tower Junction Road Improvement Environmental Assessment were received during or within five business days after the 60-day public review period, September 25, 2001 through November 23, 2001. An additional 52 responses were received since the public comment period ended. Comments received were from consultative and regulatory agencies, organizations, and individuals. Approximately 95 percent of the comments received were opposed to the preferred alternative as stated in the environmental assessment.

Comment: Access Tours, Victor, Idaho - If there is any widening of the Dunraven Road, it should only be to allow safe passage for bicycles. Unfortunately, previous road projects in Yellowstone have encouraged more motor vehicles, and for them to travel at higher speeds, notwithstanding the speed limits, while discouraging alternative forms of travel, including the use of bicycles.

Reply: The preferred alternative proposes to widen the road to a 24-foot paved top width. The 24-foot road is less than the parkwide road standard of 30-feet to reduce the amount of unacceptable adverse impacts associated with this project. This width is not adequate to promote the road for use by bicyclists. Permits would not be issued for group bicyclist tours on this road segment.

Comment: American Wildlands, Bozeman, Montana - American Wildlands is concerned about the impact of the proposed activities on wildlife connectivity. The proposal brings up opportunities to mitigate existing road fragmentation and impacts, but the EA fails to offer any relevant mitigation. Much of the project area is in prime grizzly bear habitat. From 1986-99, there were 649 reported sightings of grizzly bears along the road corridor. The EA fails to indicate if bears are having difficulty crossing the road. What are the traffic levels during the day? Are bears and other large mammals precluded from crossing this section of road?

Are there particular animal movement corridors along this section of road that should be studied and considered for highway mitigation? If this resurfacing project is interim and further reconstruction is planned in several years, these types of wildlife issues should be evaluated and considered.

Reply: Mitigation measures for the project proposal are listed on pages 25, 26, 28, and 29 of the Environmental Assessment. Due to the predominance of undeveloped land in Yellowstone National Park, park biologists have assessed that there are no specific travel corridors along this road segment. Wildlife tends to cross this road all along its length. Park biologists have determined that the road project will not unduly impede the movements of bears crossing the road.

Comment: Idaho Conservation League, Boise, Idaho - The proposal to expand the Dunraven Road to accommodate larger and longer vehicles is misguided on its face. Larger and longer vehicles should not come first. Minimal intrusion into soils and wildlife habitat should come first. It is our understanding significant whitebark pine cutting, eliminating significant food sources for grizzly bears, is part of the proposal. This is an avoidable mistake, by rebuilding the road in the current configuration. It is also our understanding the proposal calls for straightening curves, widening the roadway and expanding the linear footprint of the road. This will likely lead to more roadkill for wildlife and greater speeds, which will actually decrease safety. While safety is a worthy concern, there are reasonable means to improve the road and to increase safety without drastic measures.

Reply: This road reconstruction project has been designed to meet the goals of the project while keeping impacts to the least possible level. This would be accomplished by keeping widening to one side of the road where possible, using retaining walls, following the existing alignment as much as possible, and steepening slopes. The road will be designed for vehicles 30 feet in length. Approximately 1,300 cone-producing whitebark pine trees would be removed as a part of this project. These are trees growing adjacent to the road and located in areas of proposed cut or fill of the existing topography to accommodate the wider road and associated ditches, shoulders, and guardrail offsets. Approximately 3,000 whitebark pine seedlings will be planted in disturbed areas along the road segment to

help mitigate the removal of larger trees. The proposed roadway will follow the existing road alignment as much as possible. There will be some minor changes to improve the geometry of variable radius curves, and very tight curves to improve the safety of driving the road. The proposed road will have a wider footprint and a smoother surface than the existing road. Speeds may increase slightly, though a great increase in speed is not anticipated since the geometry of the curves will remain mostly as they are, thus limiting speed.

Comment: GYE Amphibian Survey and Monitoring Project, Victor, Idaho - With regards to the wetland west of the current road at Rainy Lake, it is not clear from the EA how much of this wetland will be lost or retained due to road reconstruction.

The round, corrugated metal culvert that is normally placed for drainage under roads is a poor choice for amphibians; they may avoid using such a structure because of the cold metal and accelerated water flow. Construction more conducive to amphibian movements would entail a box culvert or open bottom arch with natural substrate. A large structure, well lighted at both ends, may also serve amphibians better than a structure of minimum size. Please consider a well-designed, amphibian-friendly drainage structure between Rainy Lake and the wetland west of the road as an additional mitigation measure.

Given the numerous road projects in Yellowstone involving road expansion, reconstruction and occasional construction of new roads, I strongly suggest that the Park engage in a study of techniques available for mitigating road impacts on wildlife movements.

Reply: 282 square meters (3,035 sq. ft.) of wetland at Rainy Lake are envisioned to be lost by implementing this project. The type of conduit for connecting waters on the west side of the road at Rainy Lake and Rainy Lake itself has not yet been designed. All efforts will be made to design a passage for amphibians that will not hinder their movements from one side of the road to the other. The park will evaluate various studies on techniques available for mitigating road impacts on wildlife movements, and whether a park specific study should be conducted.

Comment: Wyoming State Historic Preservation Office - We received your letter stating your willingness to work with us to mitigate the adverse affect at Calcite Springs in conjunction with the Phase II construction project of the Tower Junction to Canyon Junction road.

We have also reviewed the project report for the proposed plan for the Phase I construction of the Tower Junction to Canyon Junction road and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 PR 44716-42). Site 48YE520, the Grand Loop Road, will not be adversely affected by the project as planned for Phase I. We recommend the Federal Highway Administration allow the project to proceed in accordance with state and federal laws subject to the following stipulation: if any cultural materials are discovered during construction, work in the area should halt immediately and the FHA staff and SHPO staff must be contacted. Work in the area may not resume until the materials have been evaluated and adequate measures for their protection have been taken.

This letter should be retained in your files as documentation of our determination that no historic properties will be adversely affected by this project.

Reply: Yellowstone National Park will continue to work with your staff to avoid adverse affect at Calcite Springs in conjunction with the proposed work in the Phase II construction project. The construction specifications for this project will include a stop work clause for areas in which any cultural materials are discovered during construction. Evaluation of cultural materials will be conducted by Yellowstone cultural resources division staff specialists and SHPO staff will be informed as to any new discoveries.

Comment: The Shoshone-Bannock Tribes, Fort Hall, Idaho - The Yellowstone is a culturally significant area for the Shoshone-Bannock Tribes since it is part of the Tribes' aboriginal territory. This office recognizes that if cultural properties are inadvertently discovered, contractors will halt work and notify appropriate agencies as well as tribes with interest in the Yellowstone area.

Reply: If cultural properties are inadvertently discovered during construction, the procedures outlined in the Roads Programmatic Agreement will be followed, including work stoppage, evaluation of the cultural materials, and

consultation appropriate to the terms of the Roads Programmatic Agreement, the Archeological Resource Protection Act, and the Native American Graves Protection and Repatriation Act.

Comment: Wyoming Chapter of the Sierra Club, Jackson Wyoming (WCSC) - WCSC recommends any upgrade to the Dunraven Road follow the existing road alignment with the same width “footprint” currently existing. This prime grizzly bear food source area of whitebark pine trees deserves park protection. Additional comments by WCSC were similar in content as those listed below by numerous individuals.

Reply: *The NPS believes that an overlay project that does not improve roadside drainage or the road’s structural foundation will not satisfy the goals and objectives for this project. Improved drainage ditches and deeper road base materials required for these would thus widen the road prism footprint even if reconstructed at a 20-foot width. The proposed alternative follows the existing road alignment, though the road footprint would enlarge.*

Comments: Greater Yellowstone Coalition, Bozeman, Montana - The Dunraven Road project Environmental Assessment (EA) fails in several areas by: 1) inadequately assessing impacts to whitebark pines and grizzly bears; 2) inadequately assessing impacts to current and future park transportation and visitor experience; 3) inadequately assessing impacts to human and wildlife safety on the road; 4) failing to compare this project to similar projects with impacts to wildlife, including grizzly bears.

Reply: *The environmental assessment for this project very thoroughly determined the impacts to whitebark pine in terms of acreages, tree densities, and individual trees that might be affected. Future shuttle options would not be compromised by the implementation of the preferred alternative. Human safety should be improved due to construction of a road that better meets more American Association of State Highway and Transportation Officials (AASHTO) standards for traffic volumes and type of vehicles. The project as proposed does not meet all NPS park road and AASHTO standards due to a desire to reduce resource impacts. Slight increases in wildlife roadkills may occur due to slight increases in traffic speed associated with a smoother wider road. This project has many differences in scope from other nearby recent highway projects such as the North Fork highway project between the park and Cody, WY. The park believes that the environmental assessment sufficiently describes the alternatives and impacts for the decision-maker to consider.*

Comment: Safety considerations in Alternative C and throughout the document are misrepresented. In determining the Environmentally Preferred Alternative, NPS states that “as the narrowest width option of any of the action alternatives, Alternative C does not provide a needed level of public safety.” (EA p. 47) This statement is in direct contradiction to information presented elsewhere in the EA. The speed limit on Dunraven Road was lowered from 45 to 35 mph because vehicles were not reaching the signed limit due to the curved and narrow configuration of the road (EA, p. 55). The accident rate on Dunraven Road has risen at a slower rate than elsewhere in the park, again due to the lower speeds and alert driving necessitated by the road configuration (EA, p. 55-56). Many of the accidents on Dunraven are likely attributable to weather-related road conditions, factors that no road design can ameliorate (EA, p. 56). Thus it is misleading to characterize Alternative C as failing to provide for human safety.

Reply: *We concur that the road’s accident rate is lower in part due to the fact cited in the comment and in part due to lower average daily traffic on the road and the curvilinear alignment. The proposed alternative gives two additional feet of pavement for each lane (due to a paved shoulder). This allows for additional separation given the types of vehicles currently using the road. Alternative C has the least amount of pavement width of any of the action alternatives.*

Comment: Project assumptions fail to consider the full spectrum of NPS responsibilities to protect resources and provide unique experiences for visitors. Diversity and uniqueness are supposed to typify the National Park experience. The majority of Yellowstone’s roads have been widened and straightened. There are few unpaved roads left in the park. Dunraven Road provides a unique experience for park motorists to follow its winding, narrow path over Dunraven Pass. The experience provided by Dunraven Road and its surrounding scenery and natural resources is unique not only in Yellowstone, but also in the region and nation. National Parks should be providing visitors with experiences not readily available in non-park settings today. Widening and straightening Dunraven Road to make it similar to

other roads in the park, region and nation would deprive park visitors of a unique experience and run counter to the park mission and guidelines.

Reply:

The NPS believes the trade-offs of improving traffic flow, installation of guardrails that meet crash test standards, wider road surface, and improved pullouts, outweigh the changes in the road as a result of this project. The proposed alternative does not straighten the road, the project is on the same alignment as the existing road, though the footprint of the road prism will be larger.

Comment:

The assumption in the EA that Dunraven Road must be navigable by the largest vehicles on the market today is faulty. “The steep slopes adjacent to the road present road designers with additional challenges to gain width for vehicles, even more so than for other Yellowstone roads.” (EA, p. 5). The preceding statement presumes that Dunraven Road must gain width for vehicles. The EA does not address where in park mandates this requirement lies nor does the EA explore whether Dunraven Road might be more valuable to visitors and resources alike if it is not widened to accommodate larger vehicles.

Reply:

The road will be designed for a 30-foot long vehicle. Many vehicles on the road today are longer than this and will not be recommended for traveling this road. There is no mandate that park roads accommodate the largest of vehicles, nor is the proposed alternative designed to do that. An interdisciplinary team was assembled to explore issues and solutions, and assess resource impacts vs. transportation use. A 24-foot width alternative is what the team recommended to the decision-maker.

Comment:

Less than 7 percent of the vehicles using the road are over 22 feet in length. This percentage does not warrant widening the entire road particularly due to topography and related resource impacts. NPS must assure access to visitors, not vehicles. Dunraven Road presents an excellent opportunity for Yellowstone to maintain diversity in its road system by preserving in Dunraven Road at least one narrow road which is accessible only to vehicles less than 22 feet long.

Reply:

Many other factors such as daily traffic, traffic jams, resource impacts, environmental conditions, road maintenance, and visitor experience, were considered other than vehicle length in determining a preferred alternative. Replacement of road base materials would be one factor that dictates a wider road prism. Additional width for improvements to drainage ditches, and required guardrail offsets also would require road footprint widening.

Comment:

A shuttle system should be designed for use on Dunraven Road. NPS should review and consider whether the Parkwide Road Improvement Plan (1992) should be amended to accommodate innovative solutions to Yellowstone’s road and visitor congestion.

Reply:

An alternative transportation study for Yellowstone National Park was prepared in 1994. These reports and a follow-up route-specific analysis for Dunraven occurred in 1996 and looked at the feasibility of implementing various types of mass transit systems. Surveys have shown that most visitors to Yellowstone enter and leave through different entrances of the park, of which there are five major ones. Due to the high cost of the proposed transportation systems, the park has opted to look into pilot programs to implement local area shuttles to add to the visitors options for travel in the park.

Comment:

Inadequate explanation is provided for rejection of the alternative “Reconstruct roadway at existing width and restrict vehicles over 6.7 meters (22 feet) and provide a shuttle system. The NPS does not provide explanation why a reconstruction at width, such as was done on the Northeast Entrance Road, would not be appropriate for Dunraven Road given the extreme concerns regarding grizzly bears and other wildlife, and future uncertainty about transit

options. The EA fails to weigh such an option to accomplish the stated Purpose and Need to repair the roadbed and provide a better driving experience while protecting grizzly bears and their habitat from incursion and destruction.

Reply:

Reconstructing the roadway at 22 feet would have much more impact than the road rehabilitation project on the Northeast Entrance road had. A reconstruction project would be required to have additional guardrail offsets not found on the current road, drainage ditches would be widened and improved, new and additional base material would be added to the road (increasing height of roadway, thus requiring increased width), and new culverts would need to be installed under the road to accommodate this increased width.

Comment:

NPS should maintain the road at existing width through the Rainy Lake area and provide an interpretative display describing to visitors the reasons why road expansion was not pursued based on amphibian needs.

Reply:

For safety reasons, it was a goal of the project not to have a variable-width road that goes from wide to narrow, any more than absolutely necessary for this project. A consistent road width has proven to be a safer road for motorists.

Comment:

The design and engineering plans for this project proceeded too far prior to public input.

Reply:

Design begins early to help determine impacts associated with the project, to help avoid impacts, and to help with the decision making process.

Comment:

NPS concluded that this project will not increase bear deaths, and therefore failed to enter into formal section 7 consultation with the U.S. Fish and Wildlife Service. The Park must consult with the FWS on this proposed project.

Reply:

The Park has completed formal consultation with the U.S. Fish and Wildlife Service and a biological opinion was transmitted to the park on July 2, 2002.

Comment:

The NPS failed to adequately analyze and disclose the connected and cumulative action—the full effects of the proposed action—related to this project's effects on the threatened grizzly bear, and by failing to address increased speeds, an increase in parking areas, loss of whitebark pine and other key habitat components.

Reply:

The cumulative effects of the Dunraven project and other projects in and near Yellowstone National Park were disclosed in the environmental assessment so that the reader and decision maker could put this project in context with others going on in the area.

Comment:

In the case of Dunraven Pass, there have been two vehicle-caused grizzly bear deaths over the past nine years...

Reply:

On Dunraven Pass, there have been two vehicle-caused black bear deaths over the past nine years. There have not been any documented grizzly bear deaths by vehicle collisions in the past 13 years since records have been kept.

The following comments were repeated consistently in many of the comment letters written and submitted by a number of individuals and organizations:

Comment:

The road does need repairs.

Reply:

The Park concurs that the Dunraven Road needs to be repaired. The road has deteriorated to such a degree that it is no longer safe and routine maintenance is no longer effective. In fact due to safety problems, the park closed the road for several days in August of 1998 in order to complete emergency repairs of the road surface.

Comment:

Rebuild the road at its existing width and current configuration.

Reply:

While the preferred alternative in the Environmental Assessment (EA) proposes to widen Dunraven Road, the current alignment or configuration of the road generally would not change. However, the Park, with the assistance of the Federal Highway Administration (FHWA), determined that many of the safety, drainage, rockfall, maintenance, and traffic flow problems addressed in the environmental assessment (EA) would not be resolved if the road were to be improved at its current width. Also, based on the traffic volumes, the sizes and types of vehicles that will travel Dunraven Road, the two-way traffic, and the design and travel speed, NPS Park Road Standards (1984) in conjunction with FHWA recommends widening Dunraven Road to meet minimum safety standards and guidelines.

Comment:

Repair/rebuild the road similar to what was done in Lamar Valley/NE Entrance road.

Reply:

The rehabilitation project done for the Lamar Valley/NE Entrance road did not fix all problems of that road. There was a conscious decision to forego major reconstruction until some time in the future. The Park determined that many underlying structure and safety problems exist along the Dunraven Road and cannot be adequately addressed through a rehabilitation project (as what was done on the NE Entrance road) versus the proposed full reconstruction. For example, frost heaving would still occur in areas if not corrected by replacing the underlying base material. (Frost heaving causes the pavement to bulge; hence cracks, potholes, and general collapse of the pavement often results.) Also the continued use of heavy vehicles on Dunraven Road would exacerbate this pavement deterioration where the road base is inadequate. Due to the nature of a rehabilitation project, safety issues such as the road's narrowness and the absence of a road shoulder and recovery zone would still exist. Planned parking and pullouts areas could not be provided with a rehabilitation project because NPS policy does not allow roadside improvements such as these for only rehabilitation improvements. Therefore, many areas needed for vehicles to safely pull off the road or parking spaces would not be provided with a rehabilitation project.

Comment:

Don't cut whitebark pine/protect whitebark pine.

Reply:

In many areas, whitebark pine trees are immediately adjacent on both sides of Dunraven Road. With any of the action alternatives, removal of some of the whitbark pine trees is unavoidable. Ground disturbance beyond the existing road is needed in order to repair the problems along the road, especially the problems of the underlying road structure, i.e. the road's base, improvements to drainage ditches, and requirements such as guardrail offsets. All efforts will be made during design and construction to minimize whitebark pine removal by adjusting the clearing limits where possible. If this alternative is constructed, the environmental assessment estimates that approximately 1,300 cone-producing trees, 4,300 sapling size trees, and 9,000 seedling trees would be removed. Many of these existing whitebark pine trees are found in vegetative types where these trees would not be expected to reach a cone-bearing size.

Comment:

Only 7% of the vehicles using the road are over 22' in length.

Reply:

According to the Transportation Study, Dunraven Road (BRW, 1997) approximately 6.7% of all vehicles using the Dunraven Road were greater than 22 feet (6.7 m) long. More specifically, this breaks down into the following vehicles lengths and their percentages of use on Dunraven Road: 93.3 percent are less than 22 feet long; 4.3 percent are between 22 and 30 feet long; 2 percent are between 30 and 40 feet long; and 0.4 percent are greater than 40 feet long.

Comment:

Restrict vehicles over 22' in length from using the road.

Reply:

The 6.7 percent of vehicles over 22 feet in length equates to a Seasonal Average Daily Traffic (SADT) of 280 vehicles per day. Currently the road has no vehicle length restriction and if the proposed alternative is implemented, the road surface will be wider with additional safety improvements. However, the proposed alternative in the environmental assessment does include posting a recommendation that no vehicles over 30 feet in length use the road. This recommendation could become a restriction to vehicles over 30 feet in length at some point in the future, if a Level of Service (LOS) D is not maintained. Furthermore, the vehicle length is not the only factor that is considered when establishing a safe minimum road width. Combinations of other factors in addition to vehicle length (such as design speed, vehicle widths, traffic volume, road-use objectives, etc.), are also considered for selection the appropriate road width needed. Therefore, limiting the vehicle length to less than 22 feet does not necessarily mean that a narrower road would meet acceptable, proven minimum safety standards. There is presently no intention of restricting vehicles over 22 feet in length.

Comment:

Consider the use of shuttle buses.

Reply:

The park is considering a pilot program where shuttle busses would operate out of the Canyon Village area. This shuttle service would be targeted mostly for those staying in overnight lodging or camping in the Canyon area. This potential shuttle system could be designed to drop off and pick up passengers and hikers at trailhead or picnic areas along Dunraven Road. However, due to the majority of through traffic (entering through one gate and leaving through another) in Yellowstone, the Park does not consider a mandatory shuttle system a preferable alternative.

Comment:

Limit the amount of traffic on the road.

Reply:

Park management objectives, at this time, do not include limiting traffic on the Grand Loop Road.

Comment:

Minimize the impact on natural habitat.

Reply:

The Park and FWHA have taken several measures to protect the natural environment and minimize impacts to the adjacent resources. For example, the slopes have been designed at the steepest angles possible but also so that they will successfully revegetate. Also, approximately 2,625 linear feet of retaining walls have been designed to decrease the amount of new roadside disturbance. To help reestablish vegetation, some existing steep cut and fill slopes that have little or no vegetation on them will be re-contoured to be less steep to help reestablish native vegetation.

Comment:

Don't straighten the road.

Reply:

The proposed alternative in the environmental assessment does include some curve widening, but the draft design generally follows the existing alignment. Therefore, the windy character of the existing road will essentially be

maintained. The current design speed of 35 miles per hour (mph) would be maintained, and this would also be the posted speed so as not to generate a need for a straighter road. On occasion the new design will tend to straighten some curves that are poorly configured (fix variable radius curves).

Comment:

Provide more pull-outs/wildlife viewing areas.

Reply:

For the planning and design processes for road improvements in Yellowstone, the Park carefully examines and evaluates options that allow visitors to safely pull off the road to view the special sights within the Park, especially the ever-popular wildlife. Pullout areas along Dunraven Road were evaluated for general safety, adequate sight distance, and minimal resource impacts. As a result, the preferred alternative in the environmental assessment proposes to pave 54 pullouts and expand and improve many of the other existing pullouts of the five paved pullouts and 49 gravel/dirt pullouts that currently exist along Dunraven Road.

Comment:

Protect wetlands.

Reply:

The Park identified 48 acres of wetlands along a 200-foot swath of Dunraven Road between Canyon and Tower Junctions. If the preferred alternative in the environmental assessment were implemented, approximately 0.96 acre of wetland impacts would result. This estimate includes wetlands; that have established in man-made ditches; and those that are located on seeps in the cuts and fills of the road, which the Parks expects will re-establish over a few years following construction.

The park took all measures to avoid and minimize impacts to wetlands. The fill and cut slopes were designed at the steep angles, the centerline of the road was adjusted in areas, and retaining walls are proposed in areas, all to extensively minimize wetland encroachment. The proposed alternative also includes wetland impacts at the redesigned Dunraven Pass parking area. The Park determined this better-defined and enlarged parking area is needed to accommodate increased visitation that stops in this area. With a well designed, enlarged, parking area, the Park expects that there would be a decrease of disturbance to the natural habitat in this area, because it would be designed to prevent the current practice of visitors parking outside designated parking areas. The Army Corps of Engineers has approved a Park plan to mitigate the wetland impacts from the proposed reconstruction of the Dunraven Road by obliterating the former Turbid Lake road and restoring this area to its previous wetland status.

Comment:

Keep natural resource concerns ahead of visitor service concerns.

Reply:

Dunraven road is an existing visitor use facility that is a popular destination for Yellowstone visitors. The views from the road offer spectacular scenes of natural resources. However it is a facility that is falling apart. The park's goal is to maintain this visitor facility. In doing so, through our planning and design process, we believe we have balanced visitor service with minimizing additional impacts on resources.

Comment:

Protect wildflower habitat.

Reply:

Efforts were made during the design of the alternatives to minimize impacts to natural habitat along the road corridor. Whenever possible, impacts were limited to one side of the road only. Retaining walls would be used on cut and fill slopes to reduce the amount of cutting and filling. Much of the area directly along the road edge will be impacted. Rare plant sites were inventoried and mapped to avoid these areas as much as possible. Topsoil from these areas will be removed, stockpiled, and re-applied after road construction. Much of the native seed contained in the topsoil is expected to germinate and help in revegetation of existing plant species of the area along the road edge.

Comment:

Concern about increasing the amount of wildlife road-kill.

Reply:

Road kills would continue to contribute to wildlife mortalities. However, the numbers of wildlife mortalities on this road are expected to remain low. Maintenance of existing 35 mph posted road speeds and an alignment that follows existing road curvature throughout the alignment that would temper speeds, and the addition of pullouts for slower traffic should minimize the potential for significant increase in road-kills. As compared to paved, primary roads park-wide, the Dunraven road currently has a "large mammal" road kill rate lower than the park-wide average. No threatened, endangered, nonessential experimental or candidate species of mammals were hit and killed by vehicles on the road segment in the 13-year period (1989-01).

Comment:

Keep the unique character of the road.

Reply:

Much planning and design effort has been expended in keeping and repairing features along the road segment that are of an historic nature, or that add to the character of the road and enjoyment of the visitors. Features such as masonry headwalls, guardwalls, retaining walls, will be retained as much as possible. If they need to be relocated, they will be reconstructed using as much of the salvaged stone as possible and in the same fashion as the original. In some instances, character-defining features such as log guardrails will be replaced with other types of guardrail that have met current crash testing and safety standards of the FHWA. The newer Corten steel W-beam was selected because of its trait of weathering and blending.

Comment:

Lower the speed limit.

Reply:

The speed limit on the road prior to 1997 was 45 mph. Due to the winding nature of the road, most vehicles traveled the road at 30-37 mph. Because of the information documented in the Dunraven transportation study the speed limit of the road segment from Tower Junction to Canyon Junction was lowered to 35 mph. The design speed for the proposed road reconstruction project is 35 mph, and after completion of the project the road will continue to be posted at 35 mph.

Comment:

Close the road to motorized traffic for a period each day.

Reply:

There are no plans at present to temporally restrict motorized traffic on the Dunraven Road.

Comment:

Fear that the proposed project will increase vehicle speeds on roadway.

Reply:

Maintenance of existing 35 mph posted road speeds, and the maintenance of existing road curvature throughout the alignment would temper speeds. Under the proposed alternative, a slight increase in average vehicle speed, regardless of the posted speed limit, would be expected because of the smoother, slightly wider road.

ERRATA SHEET

Page iii, Paragraph 3

Under Alternative A, about 35 to 38 hectares (86 to 94 acres) of soils and vegetation would be disturbed.

Replace with:

Under Alternative A, about 44hectares (108 acres) of soils and vegetation would be disturbed.

Page2, Paragraph 3

Work is proposed to begin in early 2002 and be completed in two construction phases over

Replace with:

Work is proposed to begin in late 2002 and be completed in two construction phases over...

Page25, Paragraph 9

Approximately 4,000 to 5,000 of these seedlings would be planted as part of this alternative.

Replace with:

Approximately 3,000 seedlings would be planted as part of this alternative

Page100, Paragraph 1

This project may affect, but is not likely to adversely affect grizzly bears.

Replace with:

This project may affect, and is likely to adversely affect grizzly bears.

Page100, Paragraph 6

The proposed project would not be likely to adversely affect gray wolves in either the short or long-term...

Replace with:

The proposed project may affect and is likely to adversely affect gray wolves in either the short or long-term...
