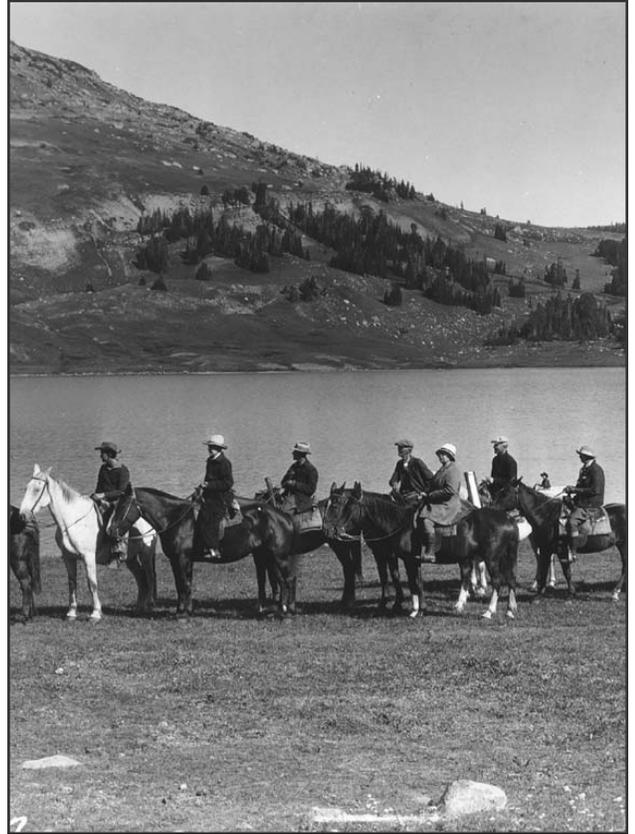


Appendix A

Comments and Responses on the Draft Environmental Impact Statement



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Appendix A — Comments and Responses on the Draft Environmental Impact Statement

Response to Agency and Organization Comments

The first section of this appendix presents copies of letters with substantive comments on the Draft EIS and Section 4(f) Statement that were received from federal agencies, state agencies, local governments and organizations. Beside each reproduced letter is FHWA's response to those comments. Letters from the following federal, state, and local agencies and organizations are included in this appendix:

- Letter 1–U.S. Department of the Interior
- Letter 2–Shoshone National Forest
- Letter 3–U.S. Army Corps of Engineers
- Letter 4–U.S. Environmental Protection Agency
- Letter 5–Yellowstone National Park
- Letter 6–U.S. Fish and Wildlife Service
- Letter 7–Wyoming Office of Federal Land Policy
- Letter 8–Wyoming State Historic Preservation Office
- Letter 9–Wyoming Game and Fish Department
- Letter 10–American Wildlands
- Letter 11–Beartooth Alliance
- Letter 12–Greater Yellowstone Coalition
- Letter 13–Sierra Club

All documents received are available for public inspection at the FHWA address listed on page 1 of the Abstract.

Responses to Individual Comments

During the comment period, the FHWA received 338 letters, comment sheets, or meeting transcripts

from the individuals. Each document was reviewed carefully and each substantive comment was coded using a four-digit number. The comment codes are not sequential because some the codes were either not used or combined with other codes. Table A-1 beginning on page A-62 provides the name of each individual that submitted a document with a substantive comment. Table A-1 is sorted by last name.

Responses to individual comments follow Table A-1 listing the commenters. Responses are provided for each substantive comment. To find how the FHWA responded to your comment, find your name in Table A-1 and then look up the comment code in the response section. Commenters without substantive comments are not listed in Table A-1. The FHWA appreciates your review and comment on the Draft EIS.

Comments are considered substantive if they:

- Question, with reasonable basis, the accuracy of the information in the document
- Question, with reasonable basis, the adequacy of the environmental analysis
- Present reasonable alternatives other than those presented in the environmental impact statement
- Cause changes or revisions in the proposal
- Provide new or additional information relevant to the analysis

Where appropriate, the text of the Draft EIS was revised for the Final EIS in response to comments.



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240



ER-02/521

AUG 8 2002

Mr. Mark B. Taylor
Federal Highway Administration
Central Federal Lands Highway Division
555 Zang Street
Mail Room 259
Lakewood, Colorado 80228

Dear Mr. Taylor:

This is in response to the request for the Department of the Interior's (Department) comments on the Draft Environmental Impact Statement and Section 4(f) Evaluation for Reconstruction of U.S. 212 (aka FH-4, Beartooth Highway), from WY-296 (Chief Joseph Highway) to the Wyoming/Montana State Line, Park County, Wyoming. The Department offers the following comments for your review.

Section 4(f) Evaluation Comments

1-1

We concur that there are no feasible and prudent alternatives to the proposed project, if project objectives are met. We also concur with the proposed measures to minimize harm to historic properties through a signed Memorandum of Agreement with the appropriate agencies, including the State Historic Preservation Office. The mitigation measures outlined in the document for cultural resources appear to be sufficient and we feel that the interpretive kiosks will be a key element in preserving the history of these features. The following are a few questions and concerns with regards to the Section 4(f) Evaluation:

Section 5.3 Section 4(f) Properties and Environmental Effects:

1-2

- *Section 4(f) Properties in the Project Area, Recreation Resources:* We concur that Island Lake and Beartooth Lake Campgrounds are considered Section 4(f) properties. However, the text does not discuss the other potential, recreational Section 4(f) properties, particularly the Beartooth Loop National Recreation Trail and other public trails. All public recreation properties/resources should be analyzed in the Section 4(f) Evaluation. If it is appropriate to dismiss these properties as Section 4(f) properties, then the text should state why they have been dismissed. If these resources are considered Section 4(f) properties, and the project constitutes a use of them, then they need to be further analyzed in the Section 4(f) Evaluation.

Response to comment 1-1

The FHWA, the SNF, the NPS and the Wyoming SHPO have developed a draft Memorandum of Agreement for mitigation of adverse effects to historic resources. The agencies are in the process of finalizing the MOA, which will be included in the ROD.

Response to comment 1-2

Section 5.3 of the FEIS was revised to include a discussion of the effects of the project on the Beartooth Loop National Recreation Trail and other public trails.

Comment

Letter 1 continued

Response

Section 4(f) Properties in the Project Area, Recreation Areas, Alignment Changes:

- 1-3 • The discussion states that there will be no alignment changes near Beartooth Campground. Aside from not shifting the alignment, will the roadway be widened in this area? Would improvement of the campground access constitute a use?
- 1-4 • From the map and the discussion of alignment changes, it appears that the roadway will not be directly impacting Island Lake Campground. However, the end of the discussion states that the closer alignment will create a use of the campground due to proximity impacts. If the proposed action does not directly impact the campground, then how was Section 4(f) use of this site determined? A direct impact typically constitutes use, while a proximity impact typically constitutes constructive use. Please clarify why the proximity impacts of the project in this case will result in use (not constructive use) of the campground.

Section 5.5 Measures to Minimize Harm, Recreation Areas:

- 1-5 • The Section 4(f) Evaluation states that the project will result in use of the Island Lake Campground; however, no measures to minimize harm were mentioned in the analysis. If there is a use of a Section 4(f) property, then it is necessary to discuss measures to lessen this impact. The text does address mitigation measures to lessen the temporary impacts of construction; however, it does not mention mitigation measures for long-term use of the site.
- 1-6 • Appendix C includes concurrence with the Fish and Wildlife Service (FWS) regarding employment of Fox Creek Campground as a workcamp location, and dismissing this impact as a Section 4(f) use of the campground. However, the appendix does not include FWS concurrence with regard to the remaining Section 4(f) properties; the potential use of these properties; and measures to minimize harm. The 1989 Department of Transportation Section 4(f) Policy Paper states that all possible planning to minimize harm should be determined through consultation with the official of the agency administering the land. Has the FWS concurred with the findings in this Section 4(f) Evaluation? If so, the Section 4(f) Evaluation should refer to this concurrence.

We appreciate the opportunity to provide these comments.

Sincerely,



Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

Response to comment 1-3

In the vicinity of the Beartooth Lake Campground, the roadway would be widened to 9.0 m (30 ft.) in the Preferred Alternative and either 8.4 (28 ft.) or 9.6 m (32 ft.) in the other build alternatives. As the DEIS and FEIS discuss, the Beartooth Lake Campground is about 160 m (525 ft.) north of the existing road, separated by a dense montane forest. Widening the road along the existing alignment would not affect the campground. The intersection of U.S. 212 and the campground access road would be altered to improve sight distance. An apron would be paved to reduce gravel on the highway. The proposed intersection improvements would not constitute a Section 4(f) use. Section 5.3 of the FEIS was revised to clarify this effect.

Response to comment 1-4

The FEIS clarifies that proximity impacts of the closer alignments at Island Lake would not substantially impair the use of the campground and would not be a constructive use.

Response to comment 1-5

See response to comment 1-4.

Response to comment 1-6

The Shoshone National Forest is the land-managing agency of the land along segment 4 and near Fox Creek. Appendix D includes concurrence by the Shoshone National Forest regarding the use of the proposed Fox Creek Campground location. As part of FHWA's consultation, the Shoshone National Forest reviewed the findings of the Section 4(f) Evaluation. Appendix D of the FEIS includes a letter from the Shoshone National Forest concurring the findings.

Comment

Letter 2

Response



United States
Department of
Agriculture

Forest
Service

Shoshone
National
Forest

888 Meadow Lane
Cody, WY 82414-4516
Voice: 307-527-6241
TTY: 307-578-1294
Fax: 307-578-1212

File Code: 1950-4
Date: July 30, 2002

Richard Cushing
Environmental Planning Engineer
Federal Highway Administration
555 Zang Street
Room 259
Lakewood, CO 80228

Dear Richard:

2-1 We have reviewed the draft EIS for the Beartooth Highway Reconstruction Project. Please accept the following comments and identification of elements of a Forest Service preferred alternative for this project. We have conducted an interdisciplinary review of the alternatives and attended the public hearings on the project. The following recommendations are a summary of those elements of an agency preferred alternative that best meets the objectives of the project while minimizing effects on the environment of the Beartooth Plateau.

2-2 We align most closely with Alternative 6, the Blended alternative with the following elements which may modify the alternative as presented in the draft EIS.

2-3 Road Width - we prefer the 32-foot road width template from beginning of the project to the Long Lake closure gate transitioning to 28 feet for the remainder of the project to the Montana State border. In our judgment this option best meets the purpose and need of the project and provides for user safety for highway travelers, adjacent recreation areas, trailheads and other attractions along the route. We considered data, which showed footprint of the road, and impacts on resources would not be markedly different from the 28-foot road width except where the steep switchback sections exist. We understand road design criteria for a 28 foot road width requires curve widening and other elements which do not support a marked environmental advantage of a 28 foot width over a 32 foot width. Since impact on resources is a primary consideration for road width alternatives, we chose the safety benefits of the 32-foot road template to the Long Lake gate as our preferred width.

2-4 Beartooth Bridge section - we prefer the Option A bridge structure and alignment in this location. This location provides wildlife crossing opportunity that the alternative following the original alignment does not, in addition to the driving safety advantages of the bridge alignment.

2-5 Top of the World alignment - we prefer the Option A minor realignment. Although many citizens preferred to leave the current alignment intact,, restoration of wetlands under the existing road bed has high probability of success. Adding additional sinuosity to the road complements the winding scenic

Response to comment 2-1

With the exception of the roadway width (see response to comment 2-3), the SNF's recommendations have been incorporated into the preferred alternative.

Response to comment 2-2

See response to comments 2-1 and 2-3 through 2-8.

Response to comment 2-3

The FEIS was revised to indicate that although a shoulder 1.2-m (4-ft.) or wider is preferred to accommodate anticipated uses, the SEE team recommended a 0.9-m (3-ft.) shoulder to minimize impact. A 0.9 m (3-ft.) shoulder adequately provides for the anticipated uses. Consequently, Alternative 6, the Preferred Alternative, has been modified to have a 9.6-m (32-ft.) roadway from the project start to the Clay Butte Lookout turnout, and a 9.0-m (30-ft.) road from the Clay Butte Lookout turnout to the road closure gate.

Response to comment 2-4

Option A at the Beartooth Ravine is the preferred alignment.

Response to comment 2-5

Option A at the Top of the World Store is the preferred alignment.



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Comment

Letter 2 continued

Response

nature of the highway experience and helps mitigate driver speed and excessive site distance important for wildlife crossing and safety.

2-6

Little Bear Fen - we prefer the bridge option but believe both options presented will adequately protect the Fen environment at this site.

2-7

Curve realignment - we prefer to maintain the existing alignments as much as possible as presented in the DEIS with no major realignment of curves at Albright, Bar Drift and Frozen Lake.

2-8

Work Camp - we prefer the Fox Creek work camp option that would construct a work camp with pit toilets for each ten sites and power, sewage disposal hookups and culinary water at each site for RV use. This combination will give contractors and employees a wide range of options for camping at the site. In the long term, Fox Creek will prove to be a sound investment of funds and provide facilities not available publicly or privately to the RV segment of National Forest and Beartooth Plateau visitors. Additional features necessary to mitigate potential impact on grizzly bear habitat are:

2-9

Bear resistant food storage boxes and sheds to accommodate storage of foods, coolers, cooking devices and any other potential bear attractants. Bear resistant dumpsters would be provided to ensure that no attractants be available to bears or other wildlife. Dumpsters would be monitored daily to insure that under no circumstance would the dumpster be filled beyond its capacity or leak attractants in the form of fluids. Containers would be emptied as necessary based on the monitoring.

2-10

A Work Camp Operating Plan must include a resident work camp manager or managers who will insure compliance with food storage requirements, monitoring of waste disposal, training for users of the work camp for dealing with bears during work and off duty hours and operation of potable water systems, septic systems and overall camp management. A designated camp manager would be required to be at the camp continuously whenever the camp was occupied by contract employees, their guests, families or any camping equipment, regardless of ownership. The manager would also assign sites, broker disputes of residents and have overall responsibility of activities in the camp.

2-11

We would entertain an option for a portable shower house, which could be removed at the end of the project. This option would be in lieu of sewer hookups at each campsite. Campground capacity can be increased to 32 units. However, work camp design must be compact so as to have a constructed footprint equal to or less than the size of the existing campground. If the footprint of the existing camp area must be exceeded, an equivalent acreage of disturbed area in the same Grizzly Bear habitat unit must be reclaimed to provide offsetting grizzly bear habitat.

2-12

We ask that the work camp be constructed as part of the project in advance of road construction. This sequence will insure the work camp is used by

2

Response to comment 2-6

The FEIS was revised to indicate the Bridge Option at the Little Bear Lake fen is the preferred option. It would be easier to construct than a retaining wall.

Response to comment 2-7

No major realignments of the curves at Bar Drift or Albright Curve are proposed in the Preferred Alternative. One switchback at Frozen Lake is proposed for an alignment shift in the Preferred Alternative to improve sight distances. Option A in the Frozen Lake area with a design speed of 40 km/h (25 mph) is proposed in the Preferred Alternative.

Response to comment 2-8

The Fox Creek Campground is the preferred workcamp site.

Response to comments 2-9 and 2-10

The *Proposed Mitigation* section of 3.5 *Wildlife* of the FEIS incorporates these mitigation measures for the grizzly bear.

Response to comment 2-11

Design elements for the workcamp would be developed in cooperation with the SNF. The Fox Creek Campground would be modified to accommodate up to 80 workers at 33 campsites. Other existing campsites along U.S. 212 would continue to be open to the public during construction. After road reconstruction is completed, the SNF would resume management of the Fox Creek Campground for public recreational use. The SNF would use and manage the campground in accordance with applicable guidelines for such campgrounds in grizzly bear habitat.

Response to comment 2-12

The Fox Creek Campground would be rebuilt before roadway construction would begin.

Comment

Letter 2 continued

Response

- 2-13 contractors during initial as well as subsequent construction activity. Requiring the first contractor to build the camp prior to beginning work will add one season to the necessary work schedule of the project.

2-13 We would like to be closely involved with design of the facility to insure the work camp will easily transition back to being a public campground after the work camp is no longer necessary.
- 2-14 Establish a speed limit of 45 miles per hour for the highway.
- 2-15 Incorporate public education about wildlife presence and proper behavior into project signing and interpretative and educational signs
- 2-16 Establish vegetation management criteria focused on maintaining safe wildlife crossing conditions for design and construction. Minimize re-vegetation needs by reducing clearing wherever possible. Re-vegetate with low vegetation where possible and use native vegetation that does not attract wildlife. Minimize the use of fertilizers known to make vegetation more palatable to wildlife.
- 2-17 Minimize site distance in design appropriately considering safety factors.
- 2-18 Provide for quiet zones and times during construction to allow wildlife to pass through construction areas.
- 2-19 Consider and accommodate where possible, the requirements of all existing wildlife species in designing bridges suitable as crossing locations.
- 2-20 Contractors must prepare and enforce a Grizzly Bear Management and Protection Plan, which is approved by the Forest Service. Elements of this plan include:

 - Location and operating schedules for work camps, staging areas, material sources and construction zones.
 - Bear resistant food and refuse storage facility location and type
 - Human food handling and storage procedure including lunch breaks, coffee breaks.
 - Bear activity reporting by contract employees and administrators
 - Training of all personnel involved in the project about bear safety, bear habits, established protocols, use of bear spray, and encounter management
 - Establish a suspend work protocol which provides for the Forest Officer in charge to suspend project activity in the immediate area of the conflict until the Grizzly Bear conflict is resolved.

Response to comment 2-13

The *Proposed Mitigation* section of 3.5 *Wildlife* of the FEIS indicates the FHWA would closely involve the SNF with the design of the workcamp.

Response to comment 2-14

Speed limits would closely match the design speed. West of the Little Bear Lake fen, the speed limit would be 56 km/h (35 mph) and 40 km/h (25 mph) east of the fen. Speed advisories would be posted where there would be design speed exceptions or significant wildlife crossings. For example, in the Beartooth Ravine, the proposed road and bridge would have a design speed of 55 km/h (34 mph), less than the adjoining road segment and would be signed for 48 km/h (30 mph).

Response to comment 2-15 and 2-16

The *Proposed Mitigation* section of 3.5 *Wildlife* of the FEIS incorporates the proposed mitigation measures.

Response to comment 2-17

The minimum sight distances provided in the design are based on the design speed of the roadway. Sight distances would vary depending on the design speed for each segment of the roadway. Impacts have been reduced in the Beartooth Ravine and switchbacks, and eastern portion of the project by the proposed reduction in design speeds. Sight distance and design speed are discussed in detail in Appendix C.

Response to comment 2-18

The *Proposed Mitigation* section of 3.5 *Wildlife* of the FEIS incorporates the proposed mitigation measures. Proposed nighttime construction activities in the wildlife crossing area would be cleanup of blasting and drilling with minor hauling. The intent would be to have isolated areas of construction activity at night and blocks of time with no construction to allow the wildlife to cross the road.

Response to comment 2-19

The bridge option at the Beartooth Ravine would accommodate wildlife movement in the area. The DEIS and FEIS discuss that all bridges would provide for wildlife crossing beneath the bridge by affording connecting riparian areas along stream banks.

Response to comment 2-20

The FEIS includes a requirement by contractors to prepare and enforce a Grizzly Bear Management and Protection Plan with the elements described.

Comment

Letter 2 continued

Response

Incorporate appropriate Forest Service Special Orders related to bear activity in operating protocols and requirements.

Procedures to be followed in the event a grizzly bear is injured or killed by anyone associated with or within the construction operation in any capacity.

Construction activity schedules allowed, annually, seasonally and daily by date, location and duration.

Provide bear repellent spray for flaggers and others without immediate access to a safe refuge or vehicle should a bear appear.

Identify a Forest Service onsite representative to deal with bear activity, construction scheduling, bear management plan monitoring and enforcement and day-to-day management of the construction operation.

Management and disposal of carrion of all types in the project area by the contractor and/or federal construction representative's onsite.

2-21

Choosing Fox Creek in lieu of a work camp at the Beartooth-Chief Joseph Highway junction was difficult for the Forest Service. However our choice was based on public comments received and no assurance that potential road management agencies (WYDOT) would locate facilities there in lieu of the existing Park Service work camp. The other issue we considered is that there is a high likelihood of water sources for the site based on geologic opinion. But we have not drilled wells to confirm the existence of water which would be critical to the work camp and the area has a history of sporadic ground water quantity.

2-22

We do not believe that a temporary work camp at Pilot Creek, which was as an option mentioned by many publics, is a prudent use of funds as the facilities would be removed after construction. Pilot Creek is not a site, which creates the setting our users look for in a National Forest Campground. Our long term plans for Pilot Creek include re-vegetation of much of the site and continuing use of the site in winter as a trailhead. Using the site as a work camp for six to eight years will only delay recovery of the site, which will be slow at best.

2-23

Some publics suggested use of private facilities for workers which would be an excellent idea if facilities existed. No private facilities exist anywhere in the area which meet the needs of the number of workers anticipated for this project, the concurrent Western Federal Lands project in Montana and the concurrent Crown Butte mine project. We know of no pending or proposed plans to build expanded RV facilities on private land. Construction of a managed work camp on National Forest will be a sure way to insure the needs of the grizzly bear and other wildlife are considered and the safety of commuting workers and other travelers is improved. We ask that potential contractors be strongly advised that workers associated with the construction project will not be allowed to camp anywhere on National Forests (Custer, Gallatin and Shoshone National Forests) in the area and must reside in the work camp or at the few private facilities available.

4

Response to comment 2-21

See response to comments 2-8 through 2-13.

Response to comment 2-22

Section 2.6 *Options Considered But Eliminated* includes additional discussion on why Pilot Creek was eliminated from detailed analysis as a workcamp location. The additional discussion includes the reasons the SNF provided in comment 2-22.

Response to comment 2-23

The proposed mitigation includes the prohibition of construction workers to camp anywhere on National Forest lands.

Comment

Letter 2 continued

Response

2-24

We look forward to continuing to work on this project with you. Our overall impression of the draft EIS is that it is well done. Please contact me with any questions about our preferred alternative for this project.

Sincerely,



REBECCA R. AUS
Forest supervisor

Response to comment 2-24

Thank you. Chapter 6 of the FEIS describes the continued involvement of the SEE team with the project as it progresses.

5

Comment

Letter 3

Response



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
WYOMING REGULATORY OFFICE
2232 DELL RANGE, BLVD., SUITE 210
CHEYENNE, WYOMING 82009-4942

July 26, 2002

Chandler Peter
Regulatory Project Manager

Mr. Bert McCauley
Federal Highway Administration
Central Federal Lands Highway Division
555 Zang Street, Room 259
Lakewood, Colorado 80228

Dear Mr. McCauley:

This is in reference to your June 10, 2002 request for review and comments on the Draft Environmental Impact Statement prepared for the Beartooth Highway Project in Park County, Wyoming. Thank you for the opportunity to comment.

3-1 As you know, this office has been involved in the review of the document as a cooperating agency and previously provided comments on the preliminary draft documents. You have strived to address our comments and concerns as reflected in the draft EIS. No additional comments are provided at this time.

3-2 We are still reviewing the conceptual wetland mitigation plan. We are interested in receiving input from other Federal and state agencies as well as the public on the plan. It is expected that such feedback will be provided when we issue the public notice for the 404 permit for the project. Please ensure that all project features that will result in the discharge of dredge and fill material into waters of the U.S. are identified in the application.

Thank you for the opportunity to comment. If you have any questions concerning this matter, contact Chandler Peter at (307) 772-2300. We have assigned File No. **199840159** to this action.

Sincerely,

Matthew A. Bilodeau
Program Manager
Wyoming Regulatory Office

Response to comment 3-1

Thank you.

Response to comment 3-2

The FHWA submitted a 404 permit application in early August 2003. It identified and described all project features that will result in the discharge of dredge or fill material into waters of the U.S.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 8
 999 16TH STREET - SUITE 300
 DENVER, CO 80202-2466
<http://www.epa.gov/region08>

July 29, 2002

Ref: 8EPR-N

Mr. Richard J. Cushing (HFHD-16)
 Federal Highway Administration
 Central Federal Lands Highway Administration
 555 Zang Street, Room 259
 Lakewood, CO 80228

Re: Beartooth Highway, Wyoming Forest Hwy. 4
 DEIS Review - 020232

Dear Mr. Cushing:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Region 8 Office of the Environmental Protection Agency (EPA) has reviewed the *Draft Environmental Impact Statement (DEIS) for the Wyoming Forest Hwy. 4, U.S. 212 (KP 39.52 to KP 69.4), the Beartooth Highway*, dated June 2002. The Beartooth Highway runs from Cooke City, MT to Red Lodge, MT through Wyoming bisecting some of the most spectacular roadside scenery and ecosystems in the U.S. Our detailed comments on the DEIS are enclosed.

We appreciate FHWA coordination with EPA on this project. The site visit in particular improved our knowledge of the issues and conditions which shape this project. The Federal Highway Administration and Cooperating Agencies have worked to develop a project that reduces impacts in awareness of this sensitive ecosystem. However, the width of the highway cross-section will still generally double. For areas with proposed realignments or grade changes, the area of disturbance will be greater. The preferred alternative will disturb 251 acres. Almost all of the impacts are in exceptional ecosystems. The areas of significant environmental impacts are: 66 acres of alpine meadow (tundra), 5.0 acres of jurisdictional wetlands, 1.6 acres of non-jurisdictional wetlands, 43 acres of mountain meadows, glacial lakes, streams, 34 acres of forest, 28 acres of shrub grassland and approximately 20 acres of Grizzly bear habitat. In a less sensitive ecosystem with no wetlands, this type of loss may be reasonable. However, because of the value of these ecosystems, we recommend that FHWA develop additional measures to reduce impacts. Specifically, we are recommending reducing the width of the highway disturbance (pavement, shoulders, drainage ditches and fore/back slopes).

Although this segment of the Beartooth Highway is narrow and has curves/grades that are not up to current highway standards, the road functions quite well as a scenic highway and park

4-1

4-2

Response to comment 4-1

The Preferred Alternative was modified to reduce impacts; total new disturbance would be 101 ha (249 ac.), of which 25 ha (62 ac.) have been previously disturbed by road construction. A fixed foreslope width is proposed rather than a fixed foreslope ratio to minimize impacts on curves. Other measures to reduced impacts have been incorporated into the design and are described in Chapter 2 under *Techniques to Avoid and Minimize Impacts*. As the DEIS and FEIS indicate, reconstructing the road to a 7.2 m (24 ft.) width along the existing alignment would disturb 81 ha. (201 ac.). The FEIS includes additional discussion in Section 2.6, *Options Considered But Eliminated* on EPA's suggested additional measures to reduce impacts. See comments 4-8 through 4-25.

Response to comment 4-2

The purpose and need for the project is discussed in Chapter 1 of the DEIS and the FEIS. The purpose and need indicates that the road does not function well. Two large vehicles cannot pass each other without one stopping and/or pulling unsafely off the highway. During field reviews, there are many locations where glass from mirrors hitting is along the roadside. While the accident rate is lower than surrounding segments, the severity index is higher. This means the accidents that do occur have a higher rate of injuries and fatalities. Projected increases in speed would be relatively low, about 8 km/h (5 mph) on average. The Top of the World Store realignments would reduce average vehicle operating speeds. The FHWA plans to use a topsoil aggregate mix on the foreslopes to assist in revegetating the foreslopes. Revegetated foreslopes would be about 2 m (6 ft.) from one's vehicle.

Accommodating current vehicle types and future vehicle volumes, accommodating current and future maintenance requirements, and supporting the SNF's management goals are the three reasons to reconstruct segment 4. The FHWA completed an accident prediction analysis to compare the expected safety performance of the alternatives at future traffic levels. The DEIS and the FEIS discuss that accident rates are projected to be 43% lower in the Preferred Alternative than in the future No Action Alternative. This information is presented in Table 33, and in the *Long-term Changes in Operating Speeds and Accident Rates* section of section 3.11 *Transportation* of the DEIS and FEIS.

Please refer to the *Needs Associated with Accommodating Projected Traffic* section of Chapter 1 in the FEIS, which discusses economic issues and concerns.

The FHWA conducted extensive revegetation test plots and developed a comprehensive revegetation and landscaping plan to minimize changes in visitor experience. Figure 2 in the FEIS was revised to indicate that the foreslopes would be topsoiled and revegetated. The proposed realignments at Top of the World Store would have lower operating speeds than the Existing Alignment Option.

Comment

Letter 4 continued

approach. As discussed in the DEIS, safety statistics also demonstrate that the road in its current design is safer than average. The very attributes that make this stretch of road such an enjoyable drive and a world class scenic experience will be diminished by the proposed project to make the road faster and more predictable. The visitor experience will diminish when these wonderful ecosystems instead of being one foot from your vehicle will be 20 feet in the distance. The increase in speed will further turn the Beartooth Highway into just another mountain highway. There are other routes available which offer efficient, predictable access to Yellowstone from Red Lodge such as Highway 120. The Beartooth Highway is normally only open 4 1/2 months out of the year.

4-3

The Beartooth Highway is a special treasure and highway design standards should be modified to reduce environmental impacts and maintain the character of the current visitor experience. This type of context sensitive design is a departure from the traditional type of highway design. However in this case, with this exceptional location, highway design should be altered to conform to the land, and minimize impacts to the ecosystems. For an example of a highway project which focused on preserving the historic design and retaining almost the same footprint as the earlier highway, please see the Historic Columbia River Highway Case Study in FHWA's *Flexibility in Highway Design*, [<http://www.fhwa.dot.gov/environment/flex/index>].

4-4

Based on the information in the DEIS, the proposed 28 and/or 32 feet wide road alternatives may not be the "least environmentally damaging practicable" alternative(s). For compliance with the 404 (b)(1) Guidelines for 404 CWA permits, FHWA should evaluate additional alternatives which avoid impacts by further minimizing the footprint of the road and construction. If the revised alternatives analysis does not completely avoid or minimize wetland impacts, FHWA should supplement the mitigation plan in the DEIS with additional alternatives for "in kind" wetlands mitigation. The impacted alpine and subalpine wetlands are rare. There may be opportunities to restore wetlands at similar elevations previously damaged by roads, off-road vehicles or mining activities.

4-5

We are recommending that an additional bridge be considered at Long Lake to avoid fens. In addition, we recommend that FHWA add more mitigation to offset the impacts to the highly valued and fragile alpine (tundra) and subalpine (mountain) meadows ecosystems. There are several areas along the highway that were disturbed by previous construction activities and have not been adequately reclaimed. Reclamation/ revegetation of these sites would provide mitigation for both permanent loss of vegetation, and the many years (if ever) that it will take to reestablish the fragile and very slow-growing plant communities.

4-6

(see
next
page)

Based on the procedures EPA uses to evaluate the potential effects of proposed actions and the adequacy of the information in the DEIS, the Preferred Alternative identified by the DEIS for the Beartooth Highway will be listed in the Federal Register in the category EC-2. This rating means that the review has identified environmental impacts that should be avoided in order to fully protect the environment, and the DEIS does not contain sufficient information to thoroughly assess environmental impacts that should be avoided to fully protect the environment. Enclosed is a summary of EPA's rating definitions.

Response

Response to comment 4-3

The design criteria shown in Table 4 of the DEIS and FEIS and discussed in Appendix C were selected based on the road's functional classification and the anticipated level and type of traffic in 2025. In accordance with FHWA's regulations (23 CFR 625), the road is being reconstructed to guidelines adopted by the FHWA and WYDOT. To minimize environmental impacts, FHWA has used the minimum values that these design standards allow, and extensive revegetation efforts are proposed. Additionally, in accordance with FHWA's *Flexibility in Highway Design*, FHWA has already implemented many design exceptions to further minimize environmental impacts. Design exceptions would include a reduced shoulder width, horizontal curvature at the switchback locations, steepened foreslopes, and design speed at the Beartooth Ravine, switchbacks, and the section of the project from Little Bear Lake to the east end of the project. Refer to Appendix C for further explanation of all design controls and elements of the design.

With respect to the Historic Columbia River Highway (HCRH) Case Study, circumstances associated with that project differ greatly from the circumstances associated with the Beartooth Highway Project. First, road use is different, which accounts for a different functional classification. The HCRH is classified as a collector road whereas the use of the Beartooth Highway qualifies it as an arterial road. Second, immediately paralleling the HCHR is a high-speed highway, U.S. 84, that may be used by larger and faster destination-oriented traffic. Third, the case study did not have to address economic concerns. Both U.S. 84 and the HCRH access the same towns. If FHWA were to build the Beartooth Highway to a standard that discourages the use of larger, destination-oriented traffic, such traffic could likely bypass Red Lodge altogether, thereby affecting its tourism-based economy. Fourth, the HCRH does not have to deal with the same maintenance issues, as does the Beartooth Highway, i.e. the need for snowplowing and snow storage.

Response to comment 4-4

See response to comments 4-1 and comments 4-8 through 4-25. Alternatives with roadway widths less than those proposed in the Preferred Alternative are not practicable because they do not meet the purpose and need. All reasonable opportunities to mitigate for unavoidable wetland impacts were investigated and described in the *Conceptual Wetland Mitigation Plan*. No opportunities to restore wetlands at similar elevations previously damaged by roads, off-road vehicles or mining activities were identified. See response to comment 4-20.

Response to comment 4-5

At EPA's suggestion, the proposed alignment at Long Lake was modified to minimize wetland impacts. All build alternatives except Alternative 4 would avoid all fens, including those adjacent to the Long Lake bridge (see Table 7 of the FEIS).

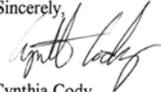
Comment

Letter 4 continued

a summary of EPA's rating definitions.

We appreciate your interest in our comments. If you have any questions or want to discuss these comments, please contact Dana Allen at (303) 312-6870 or Rex Fletcher with wetland questions at (303) 312- 6702.

Sincerely,



Cynthia Cody
Director, NEPA Program
Office of Ecosystems Protection
and Remediation

Enclosures

cc: Chandler Peters, COE
Gary Reynolds, SNF
Eleanor Williams Clark, YNP

3

Response

Response to comment 4-5 (cont'd)

The FHWA evaluated numerous areas disturbed by the previous road construction activity. Some of these areas are proposed for reclamation. These areas are discussed under the *Proposed Mitigation* section of section 3.6, *Vegetation, Timber and Old Growth Forest*. Implementation of the proposed landscaping and revegetation plan would revegetate disturbed cuts and fills as well as other disturbed areas.

Response to comment 4-6

The Preferred Alternative was modified to reduce environmental impact. The FEIS includes additional information about reasonable alternatives evaluated but eliminated from detailed study.

**EPA Region 8 – Detailed Comments
Beartooth Highway (Forest Highway 4) DEIS
July 29, 2002**

Alternatives

4-7 The build alternatives analyzed in the draft EIS for the Beartooth Highway, Segment 4 are all similar and have substantial adverse environmental impacts caused by widening the road from the existing 18' width to 28' or 32' with complete reconstruction. The majority of the impacts appear to be caused by the reconstruction of the roadbed and connecting slopes to meet AASHTO and Wyoming guidelines.

4-8 Based on the information in the DEIS, the proposed 28 and/or 32 feet wide road alternatives may not be the "least environmentally damaging practicable" alternative(s). For compliance with sections 230.10 (a) and (d) of the 404 (b)(1) Guidelines for 404 CWA permits, FHWA should evaluate additional alternatives which avoid impacts by further minimizing the footprint of the road and construction. The more promising of these alternatives should be fully analyzed to allow comparison of environmental impacts with the existing alternatives in the DEIS. Some potential ways to limit the area of disturbance are reducing the pavement width, and combining or reducing the shoulder and ditch. Reevaluating areas needing substantial earthwork to change the grade or curve could also reduce the footprint of the highway. We recommend the following additional alternatives or combinations of alternatives:

1. 20-ft. wide road (9-ft. lanes, 1-ft. shoulders) in combination with 3 or 4;
2. 24-ft. road (11-ft. lanes, 1-ft. shoulders) in combination with 3 or 4;
3. Mix of reconstruction for areas with major deficiencies and "resurfacing, restoration and rehabilitation" (3R) for the remainder of the highway;
4. Replace the bridges in disrepair, widen curves where needed to reduce pavement raveling, bridge the fen areas and the crossing near Long Lake, and 3R the remainder of the highway.

4-9 The DEIS notes that the Beartooth Highway itself is eligible for inclusion on the National Register of Historic Places. As discussed above, we recommend that additional alternatives be developed to preserve more of the historic nature of the highway.

Design Variances

4-10 The Beartooth Highway is a special treasure and highway design standards should be modified to reduce environmental impacts and maintain character of the current visitor experience. It appears that the key to reducing impacts, will be reevaluating the types of design decisions and tradeoffs that have been made in developing the initial set of alternatives. Some areas that should be investigated for design variances are:

Response to comment 4-7

The Preferred Alternative was modified to reduce roadway width to 9.0 (30 ft.) between the Clay Butte Lookout turnoff to the road closure gate. The majority of impacts would be the result of providing safe foreslopes and adequate ditches, neither of which are present along the existing road. All build alternatives must be designed to the standards of Wyoming Department of Transportation in accordance with FHWA's regulations (23 CFR 625). The proposed widths are a reduction from WYDOT standards and all build alternatives would closely follow the existing alignment along 80 percent or more of the length. See response to comments 4-3.

Response to comment 4-8

Section 2.6, *Options Considered But Eliminated* of the FEIS includes a discussion of EPA's recommended four alternatives. All four alternatives would involve a roadway width narrower than the Preferred Alternative. Based on the purpose and need discussed in Chapter 1, alternatives with roadway widths narrower than the Preferred Alternative are not practicable because they do not fulfill the project purpose and need.

Response to comment 4-9

All build alternatives would adversely affect the footprint and location of the road. The DEIS and FEIS discuss that the build alternatives, however, would closely follow the existing alignment along 80 percent or more of the length. The overall character of the road would be preserved in the Preferred Alternative by retaining the switchbacks that convey the engineering accomplishments and preserving the overall characteristics of setting, feeling, association, and location. See the Wyoming State Historic Preservation Office letter (letter 8).

Response to comment 4-10

All build alternatives must be designed to guidelines adopted by the FHWA and WYDOT in accordance with FHWA regulations (23 CFR 625). The design standards have been modified in consultation with the NPS, SNF, WYDOT, and USFWS to minimize environmental impacts and maintain the character of the highway including a reduced shoulder width, horizontal curvature at the switchback locations and Beartooth Ravine, steepened foreslopes, and exceptions in the design speed. Refer to Appendix C for all design controls and elements of the design.

Attachment to Letter 4

- 4-11 1. Reducing the design vehicle length from the 12 m [40 ft.] (cross-country buses, large RVs) (Page 22, Table 4). As we understand current traffic patterns, some of these very large vehicles already use the Beartooth Highway with its narrow width and tight curves. It appears that many other RVs are already and will continue to be discouraged from using the Beartooth Highway because of the steep grade and many tight turns on the next segments of the highway into Montana (previously reconstructed). Looking at current RV use, design does not appear to be a major factor in RV traffic. Alternative routes are available such as using Highway 120 and Chief Joseph Highway. This appears to be a reasonable alternative since the Beartooth Highway is closed 7.5 months of every year (winter).
- 4-12 (see next page) 2. Reevaluating some of the horizontal curves, grades and drainage improvements to reduce the area of impacts. The proposed design needs to be reevaluated to look for additional tradeoffs between the desired highway design and reducing environmental impacts. For areas requiring substantial disturbance, design exceptions could reduce environmental impacts while still providing a serviceable road.
- 4-13 (see next page) 3. The analyses of design criteria also need to weigh the importance of particular design criteria. Many of the road construction practices and realignments are desirable but not absolutely necessary. For example, the pavement could be widened to provide 11 ft. lanes to avoid catching mirrors with one foot shoulders to reduce pavement raveling. Curve realignments and improving drainage problems should be weighed against the degree of the problem and the area and type of disturbance to correct the problem.
- 4-14 (see next page) 4. The overall issue of maintenance and ownership of the Beartooth Highway will be determined primarily through political and financial decisions, not road design. The main problem with maintenance is heavy snowfall, mountain terrain, remoteness, and lack of funding. A newly constructed road of any design will not solve these problems. Improvements which will make maintenance easier with little environmental impact should be incorporated into the design. However, design criteria which generate major disturbances/environmental impacts should be reevaluated. Is there a possibility of re-programming the money saved by building a more modest highway into maintenance and snow removal funding?
- 4-15 (see p. A-16) 5. Large shoulders to accommodate bicycles and pedestrian years are desirable when the environmental tradeoffs are minor. In this case, because of the value of the ecosystems directly adjacent to the highway, we recommend that the design tradeoffs be made in favor of protecting ecosystems and minimizing barriers to wildlife crossings.
- 4-16 (see p. A-16) 6. Several of the realignments are proposed to increase vehicle speed through tight turns. Increasing speed several miles an hour on a mountain road normally full of stop-and-go sightseers appears to be of limited utility, particularly when there are significant environmental impacts and alternative routes.

Response

Response to comment 4-11

Because the Beartooth Highway is designated as an approach road to Yellowstone National Park, the road should accommodate visitors to the park in the future, as it does now, which typically include larger recreational vehicles. The existing switchbacks in Montana accommodate buses within the existing curve radius. The alignment would allow tour buses from Red Lodge to navigate the highway and would accommodate future park shuttles. Currently, larger vehicles in the Wyoming portion of the highway use most of the road, traveling into the opposing lanes, which is unsafe.

The FHWA is uncertain as to the basis of EPA's claim that "...other RVs... will continue to be discouraged from using the Beartooth Highway because of the steep grade and many tight turns on the next segments of the highway into Montana (previously reconstructed)." Based on 3 years of traffic counts, approximately 5% (100 per day in 2025) of the vehicles that currently use the Beartooth Highway are bus/recreational vehicle, motor home or motor home with trailers. The traffic counts conducted on the highway also indicated that 3% of the vehicles are greater than 10 m (30 ft) in length. Current RV usage trends indicate that more RVs will be using the highway as the population increases. According to the *Key Findings of the 1996 Recreation Roundtable Survey: Outdoor Recreation in America 1996*:

Sales of towable RVs and motorhomes rose nearly 15% in 1994, with the industry posting its highest unit sales since 1978. The dollar volume of recreational vehicles produced in 1994 was the highest in history, totaling \$10.3 billion. Since 1991, the value of RV wholesale shipments has increased by 50%.... The total value of RV loans topped the \$11 billion mark in 1995, a 9% increase over the previous year. The majority of motorhome buyers/borrowers have a family gross income of more than \$50,000 (76%), have lived in their home for more than 10 years (58%) and are between the ages of 35 and 54 (63%).

In addition, the *Developing Decision Support for Forest Recreation Management* indicated:

There is a long-term growth in primitive camping because of better tents, recreational vehicles and camping equipment...Participation in developed camping will increase in frequency, with participation increasing 50% nationally and 10% in the North over the next 50 year. Rapid growth in developed camping owes to an increased popularity of motor homes (particularly among retirees), more singles camping with friends, and less families camping.

Response to comment 4-11 (cont'd)

Also, the *Demographic Trends and Facilities Modernization in the Corps of Engineers Recreation Program* discussed:

This traditional customer base will continue to exert a powerful economic influence as baby boomers reach their peak earning years and then begin to retire in greater and greater number. This large population of white middle-class baby boomer and their families require recreational facilities for their relatively affluent recreational interests, e.g., camping with recreational vehicles, the increasing use of personal water craft, sailing and power boats, and the Corps should continue to accommodate their needs.

Response to comment 4-12

A thorough design analysis has been completed to balance impacts to the environment with current recommended design guidelines. The proposed design is at the minimums to satisfy the purpose and need for the project. The *Techniques to Avoid or Minimize Impacts* section in Chapter 2 of the FEIS describes techniques that have been used, and would continue to be used during final design, to avoid and minimize impacts further if possible.

Response to comment 4-13

The FHWA does not agree with the comment "...road construction practices and realignments are desirable but not absolutely necessary" given the dual use of the road. A travel lane width was selected based on an analysis of the roadway functional classification, design traffic volumes, design speed, mix of vehicle size and use and maintenance vehicles. Shoulders 0.3-m (1-ft.) are inadequate for the Beartooth Highway where the roadway section is saturated for long periods of the season and are inadequate for safety purposes. Please refer to the *Travel Lane Widths* and *Shoulder Widths* sections of Appendix C. Also, Section 2.6, *Options Considered but Eliminated* includes additional discussion on different width alternatives.

Response to comment 4-14

The FHWA does not agree that road design does not play a part in determining who would maintain the road. If the proposed improvements do not meet minimal industry standards or make future maintenance unreasonably expensive, WYDOT may justifiably refuse maintenance responsibility of the road. 23 CFR 625 requires FHWA to incorporate maintenance standards into the design of the road.

Maintenance problems are not strictly due to heavy snowfall, mountainous terrain, remoteness, and lack of funding. Other contributing issues include a narrow existing road with constant pavement edge raveling, insufficient ditches and culverts that allow saturation of the subgrade and deterioration of the road surface, the alignment of the road through wetlands (particularly at the Top of the World), and flooding of the road due to the span and alignment of the existing bridges.

Response to comment 4-14 (cont'd)

Several key design elements improve the ease of maintenance and reduce the cost of maintenance of the highway. These include wider travel lanes and shoulders to better accommodate snow plows, improved graded and paved ditches to convey drainage and provide snow storage, paved shoulders and graded foreslopes to reduce edge raveling and help support the structural section, and realigned bridges to reduce road flooding. Balancing maintenance and environmental impacts resulted in the design measures included in the Preferred Alternative.

With respect to EPA's request to consider reprogramming the savings, resulting from building a road smaller in scope, into maintenance and snow removal funding, the Federal Highway Funds that would be used to construct the road may not be diverted to maintenance activities. The proposed roadway design would have an effect on maintenance and ownership. A highway not built to standards would result in substantially more maintenance costs. Construction of an upgraded facility is a one-time cost, whereas maintenance costs are determined over the life of the highway.

Response to comment 4-15

The Preferred Alternative has been modified to have a shoulder width of 1.2 m (4 ft.) from the project start to the Clay Butte Lookout turnoff, a 0.9 m (3 ft.) shoulder to the road closure gate and a 0.6 m (2 ft.) shoulder to the project end. The Preferred Alternative balances environmental impacts with design standards by varying the shoulder width. Due to the mix of stopped and moving traffic, wider lanes and shoulders are desired. The design in the wildlife crossing areas has been developed in conjunction with the FWS and SNF to accommodate animal movement. Many tradeoffs (exceptions) to the standards have been incorporated into the build alternatives to minimize ecosystem impacts.

Response to comment 4-16

The realignments proposed in the Preferred Alternative were designed to improve sight distance and transition the driver from straight sections of roadway into more curvilinear sections of roadway, in accordance with the design speed, which very closely matches the existing speeds and curvature.

The only realignments that would increase operating speed are the Beartooth Ravine, which is a high accident location due to the curvature. Operating speeds are estimated to increase by 8-15 km/hr (5-10 mph) in the Beartooth Ravine; the speeds would be consistent with the operating speeds on either side of the Ravine. The Top of the World Store alignment would reduce speeds due to the curvilinear alignment when compared to the existing straight road. Consistency in the alignment would greatly improve the safety of the roadway. Again, wider travel lanes and shoulders would help accommodate the mix of stopped and through traffic.

Response to comment 4-16 (cont'd)

Realignments are proposed in the following locations.

Beartooth Ravine – The existing alignment is unsafe because of the difference in design speeds in the ravine section and the adjoining sections. The design speed of the realignment in the Preferred Alternative would be 5 km/hr (5 mph) less than the adjoining sections.

Top of the World Store Realignment – The preferred Option A was proposed to help reduce operating speeds, minimize impacts to the wetland communities in the area, and provide the opportunity for wetland restoration.

Frozen Lake – The preferred Existing Alignment Option closely matches the existing alignment, except at the switchback. The realignment would make the downhill lane safer by providing increased sight distance.

Bar Drift – The preferred Existing Alignment Option closely matches the existing alignment with only minor adjustments.

Albright Curve – The preferred Option A best balances safety and traffic operations with avoidance and minimization of environmental impacts. It would make travel downhill safer.

Attachment to Letter 4

Impacts and Mitigation

4-17 The preferred alternative also includes 67 pullouts. The location and size of pullouts were not specifically identified in the DEIS. Some of the schematic designs for the pullouts cover substantial surface area. It is not clear how frequently the supersized pullouts will be used. Will any of the simple “pull to the side of the road” pullouts be reconstructed? Additional information is needed in the FEIS on the location and potential impacts of the pullouts. Will porous material be used to reduce runoff in the pullouts such as gravel or special pavements?

4-18 The DEIS evaluates two alternatives for the highway crossing of the Little Bear Lake Fen, and retaining wall and a bridge. EPA recommends selection of the bridge option to more fully protect the fen. Fens are recognized as unique and irreplaceable resources.

4-19 For the highway crossing at Long Lake, the proposed alignment is slightly rotated from the current highway. For this area we recommend developing a bridge alternative to reduce the impacts to the aquatic resources south of the highway. This is also a location to consider developing an alternative which stays within the existing roadway because of wetlands on both sides of the road.

4-20 The DEIS and accompanying *Conceptual Wetlands Mitigation Plan* outline the potential wetlands mitigation alternatives including locations, likelihood of successful mitigation, constraints to on-site mitigation, etc. The wetlands mitigation analysis identified potential restoration sites and high-priority and low-priority creation sites. From our review of the analysis, we concur that the low priority creation sites will not provide good mitigation. Some type of off-site mitigation may need to be developed because of the difficulty in establishing high altitude wetlands that were not previously wetlands or do not have the right hydrology. Of the potential of offsite locations, the site along the stream flowing into the Yellowstone National Park appears to be the only viable offsite location evaluated to date. However, this would not offer “in kind” mitigation. Therefore, FHWA should further evaluate opportunities for “in kind” compensatory mitigation within the same geographic area and at similar elevation to the impacts. One area that may have potential sites is north of the highway toward Cooke City where previous mining, road or off-road vehicle activities may have historically damaged wetlands. The mitigation ratios will need to be identified in the 404 CWA permit process.

Wildlife

4-21 The lower portion of this section of the Beartooth Highway has been identified as an important wildlife crossing area. The main Threatened and Endangered species of concern is the grizzly bear. There are other types of wildlife that also cross the highway in this area such as black bears, elk, deer, moose and many small game and non-game species. It appears that additional mitigation is needed to ensure that the road does not increase wildlife mortality or becomes a greater barrier.

4-22 As discussed in the DEIS, speeds over 45 mph significantly increase wildlife mortality. The preferred alternative flattens the curves in Beartooth Ravine and significantly widens the road

Response

Response to comment 4-17

The Preferred Alternative was modified to eliminate one pullout at a wildlife crossing. The location, size, and necessity of each proposed pullout would be reviewed and possibly modified during final design to avoid any additional wetland impact. The larger pullouts are parking areas located and designed in cooperation with the SNF, the land managing agency. Ten parking areas are proposed; most would be located where an existing parking area or pullout exists, or where an abandoned road section would exist after reconstruction. In the Preferred Alternative, 55 simple “pull to the side of the road” pullouts are proposed, generally in locations of existing pullouts. Because of the minimal shoulder width, particularly in the alpine area, pullouts would be very important in accommodating stopped and through traffic. All pullouts and parking areas would be paved to minimize erosion, which would protect the sensitive roadside environment.

Response to comment 4-18

The FEIS was revised to indicate the Bridge Option at the Little Bear Lake fen is the preferred option. A bridge would be easier to construct than a retaining wall.

Response to comment 4-19

At EPA’s suggestion, the proposed alignment at Long Lake was modified to minimize wetland impacts. All build alternatives except Alternative 4 would avoid all fens, including those adjacent to the Long Lake bridge (see Table 7 of the FEIS).

Response to comment 4-20

The proposed mitigation includes in-kind and in-place wetland restoration and creation. Other opportunities for in-kind or in-place wetland mitigation were not identified. Potential sites north of Cooke City where previous mining has disturbed wetlands are currently undergoing cleanup as a Superfund site and are not available for mitigation. Proposed mitigation ratios are presented in the 404 permit application.

Response to comment 4-21

The FHWA met with the SNF and USFWS to discuss each wildlife crossing identified in the project area. The *Proposed Mitigation* section of Section 3.5 *Wildlife* includes appropriate measures to minimize impacts at wildlife crossing areas.

Response to comment 4-22

The design speed of the proposed bridge at Beartooth Ravine is 55 km/h (34 mph) and the design speed of the adjoining sections is 60 km/h (37 mph). Speed limit signs would be posted at these speeds. Speeds in excess of 72 km/h (45 mph) would not be legal. Appropriate wildlife crossing signage is part of the proposed mitigation. Most wildlife cross when traffic volumes are very low.

Attachment to Letter 4

4-22 from 9 ft. lanes, no shoulder; to 12 ft. lanes, 4 ft. shoulder (16 ft.). The proposed project will also increase the wide-open appearance of the road by clearing vegetation for the ditches and clear zone. We anticipate that this wide open road will spur many drivers to significantly increase their speed, exceeding 45 mph through the section directly impacting wildlife. If the road is widened, additional measures should be incorporated in the design to keep the speeds low in wildlife crossing areas (ie., narrow lanes, tight curves, speed bumps, etc.).

4-23 The proposed alternatives in the DEIS all added a minimum of a 10-ft. "clear zone." This change will also significantly impact wildlife by creating a barrier for species that require cover, such as lynx. The FEIS should include additional mitigation such as reevaluating the need for the full 10-ft. clear zone in wildlife crossing areas and ways to soften the clear zone by planting shrubs or other plants that provide some cover.

Vegetation

4-24 The upper 2/3 of this segment of the Beartooth Highway impact highly valued and fragile plant communities, alpine (tundra) and subalpine (mountain) meadows ecosystems. These rare and sensitive plant communities are easily damaged, and very slow to recover. We are therefore recommending that FHWA further reduce impacts by adding more mitigation to offset the impacts to the highly valued and fragile plant communities. There are several areas along the highway that were disturbed by previous construction activities and have not been adequately reclaimed. Regrading and revegetation these sites would provide mitigation for both permanent loss of vegetation, and the many years that it will take to reestablish the fragile and very slow growing plant communities.

4-25 On page 135, the DEIS discusses the completion of revegetation when a . . . "uniform perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established . . ." This standard describes when sufficient revegetation has occurred to control sediment to close out the construction storm water permit. While controlling sediment is very important to protecting water quality, the subalpine and tundra ecosystems will still need many years to recover from highway construction. The FEIS should add additional measures to ensure that the revegetation activities will continue until the plant community has comparable plant diversity and densities to preconstruction conditions. For example, in year seven after the storm water permit has been closed out, who will replace plantings that have been damaged by vehicles or a dry winter?

Response

Response to comment 4-23

A 3-m (10-ft.) clear zone from the edge of the travel lane is the minimum needed in areas without guardrail. In nearly all cases, the shoulder and foreslope would provide the entire clear zone. The clear zone would be revegetated, but kept cleared of trees for safety reasons. Figure 2 of the FEIS has been revised to show the clear zone.

Response to comment 4-24

The *Techniques to Avoid and Minimize Impacts* section of the FEIS includes additional discussion of measures FHWA would implement during final design to minimize impacts, particularly in alpine areas. The FHWA evaluated numerous areas disturbed by the previous road construction activity. Some of these areas are proposed for reclamation. The FEIS discusses these areas under the *Proposed Mitigation* section of section 3.6, *Vegetation, Timber and Old Growth Forest*. Implementation of the proposed landscaping and revegetation plan would revegetate disturbed cut and fill slopes as well as other disturbed areas.

Response to comment 4-25

The FHWA does not believe that additional monitoring is needed beyond the time when the revegetated slopes are finally stabilized, or have a uniform perennial vegetative cover with a density of 70 percent of the native background vegetative cover. The DEIS and FEIS discuss that FHWA anticipates areas would become finally stabilized within 5 years after completing revegetation. In more exposed locations, especially those in which snow covers the soil well into the growing season such as the Bar Drift or the west summit, revegetation may be a slow process. Initial revegetation efforts may not succeed in these or other locations, and revegetation monitoring in the period following reconstruction may conclude that additional revegetation efforts would be necessary. Slopes that are finally stabilized would be able to withstand seasonal variations in growing conditions, such as precipitation. Maintenance of the roadway, including the roadside, will be the responsibility of the maintaining agency after revegetation monitoring.

SUMMARY OF EIS RATING DEFINITIONS

ENVIRONMENTAL IMPACT OF THE ACTION

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes in the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. (The) EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). (The) EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of significant magnitude that they are unsatisfactory from the standpoint of public health or welfare, or environmental quality. (The) EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1--Adequate

(The) EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for (the) EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new, reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3--Inadequate

(The) EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, and which should be analyzed in order to reduce potentially significant environmental impacts. (The) EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. (The) EPA does not believe that the draft EIS is adequate for the purposes of NEPA and/or §309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 - Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Comment

Letter 5

Response



United States Department of the Interior

NATIONAL PARK SERVICE
P.O. Box 168
Yellowstone National Park
Wyoming 82190

July 29, 2002

Mr. Richard J. Cushing (HFHD-16)
Federal Highway Administration
555 Zang Street, Room 259
Lakewood, Colorado 80228

Dear Mr. Cushing:

5-1

In response to the Draft Environmental Impact Statement for reconstruction of the Beartooth Highway, Yellowstone National Park offers the following comments. During the public meetings, there were several concerns expressed by participants comparing what we are doing with roads in Yellowstone and what is proposed for the Beartooth Highway. If this were a park road, it would be designed to follow most of the existing alignment including the existing curvature. It would also be designed with a narrower width than the park's road standard of 30 feet due to its mountainous terrain, the impacts of the wider road and the existing and projected average daily traffic of the road. The preferred alternative does follow 80 percent of the existing alignment and although park-like, this is not a park road. Unlike most highways, the Beartooth Highway is part of the experience, not just a means of getting from point A to point B. If compared to the Dunraven Pass Road within Yellowstone, the Beartooth is a much more scenic and nationally significant highway. It deserves our best effort.

5-2

The question of which agency is going to maintain the road remains an issue and will only be solved with adequate funding for the agency selected. This is a separate issue and should be separated from the decisions needed to determine what is the most appropriate design for this road.

5-3

In the FEIS, there should be a more complete analysis of the impacts for each of the proposed road widths. It is difficult to determine the impacts without adequate analysis. Although we have previously concurred on the preferred alternative #6, there may be some opportunity to incorporate some of the specific comments mentioned below.

DESIGN:

5-4

Rather than being driven by visitor experience, much of the road design appears to be driven by different agency standards that may or may not apply. For example, the design vehicle length is 40 feet, when only 1 percent of the historic traffic is longer than 30 feet. The road could be signed with recommendations for 30-foot vehicle lengths, since 99 percent of the traffic would be accommodated. If the road was designed for a shorter length (30 feet), many of the curves could be tightened reducing the overall impacts. Large, commercial busses currently use the

Response to comment 5-1

In the roadway design and revegetation plans, the FHWA and the cooperating agencies have expended considerable effort to maintain the scenic quality of the road, one of the project's purpose and need, while addressing the other project purposes. The proposed standards are very similar to those used in the Park. Other measures to reduce impacts, which have been used successfully on Park road projects, have been included are described in the *Techniques to Avoid and Minimize Impacts* section of Chapter 2. Also, see response to comment 5-6 and Appendix C.

All build alternatives have alignments that closely follow the existing alignment. Existing curvature of most curves are generally followed. Alternative 6, the Preferred Alternative, has been modified to have a 9.6-m (32-ft.) roadway from the project start to the Clay Butte Lookout turnoff, a 9.0-m (30-ft.) road from the Clay Butte Lookout turnoff to the road closure gate, and 8.4-m (28-ft.) from the road closure gate to the state line.

Response to comment 5-2

The FHWA agrees that the issue associated with jurisdiction is separate from the decision on the reconstruction project. Maintenance and road design, however, are integrally related. As Chapter 1 of the DEIS and FEIS discuss, one of the purposes and needs for the project is to provide a roadway that can be reasonably maintained by a maintaining agency. For example, providing travel lanes of insufficient width to accommodate snowplows would result in a roadway that cannot be reasonably maintained. In its current condition, the road cannot be reasonably maintained. The FHWA is required to follow 23 CFR 625.3, which requires state standards be used in design of the proposed project. This regulation also addresses maintenance.

Response to comment 5-3

Five build alternatives have been analyzed in detail. The DEIS and FEIS devote substantial treatment to each alternative considered in detail, including disclosing quantitative impacts on wetlands, wetland mitigation opportunities, cultural resources, vegetation, old growth forest, sensitive species, grizzly bear habitat, and whitebark pine. These resources were identified as most of the significant issues. Direct, indirect and cumulative impacts also are described for each alternative. In addition, reasonable alternatives that are not practicable and do not fulfill the purpose and need, and that were eliminated from detailed study are discussed quantitatively and qualitatively.

Response to comment 5-4

The FHWA is required to follow 23 CFR 625.3, which requires state standards be used in the design of the proposed project. Both FHWA and WYDOT have adopted AASHTO standards. A 10.8 m (34 ft.) width is the AASHTO-recommended width.

Comment

Letter 5 continued

Response

Beartooth with very few accidents. With additional pullouts, that travel mode could continue. Widening the current road width from 18 feet to 28 or 32 feet, which are both Wyoming Department of Transportation (WYDOT) standards for widths, is a significant increase in the paved width and corresponding impact.

5-5

Another overall concern is the amount of impact in correcting the problems with the existing road. Many of the curves have existing impacts far greater than 18 feet now because the vehicles cut the corners. There are rock fall and drainage problems that need to be corrected in any event, so the impacts of going to a wider road may not be as significant when these factors are considered.

5-6

Perhaps the same standards the Federal Highway Administration uses in Yellowstone National Park could apply to such a scenic road. If there is a desire to reduce the overall impacts on this road, it may be necessary to reduce the overall width.

MAINTENANCE:

5-7

It is Yellowstone National Park's preference that WYDOT obtain adequate funding and take over the maintenance and plowing of the road. If that were not possible, the NPS would consider the continued maintenance of the road, but only if adequate funding were available. The National Park Service has been very consistent and feel if we operated the road that we would want it to be a Parkway (or something similar) and that it be funded without hindering other existing NPS funding.

5-8

Based on many years of road maintenance experience with the Beartooth Highway, the current maintenance base location is preferred regardless of who is maintaining the road. The proposed relocation of the maintenance base is too far away to facilitate the necessary maintenance operations. It has been our experience that additional guardrails mean additional long term maintenance operation expense, mostly due to conflicts with snow plowing operations.

SAFETY:

5-9

Considering that safety is a critical factor in the widening of the road, it is important to note that the accident history on this road is very low with the existing 18-foot wide road. Widening the road could potentially increase the accident rate for both vehicles and wildlife as the average speed increases.

5-10
(see
next
page)

Typically, the driving experience is a factor in safety. Lanes should be of consistent width as accidents can happen when unexpected lane width changes occur. It seems that a 24-foot width (10 foot lanes with 2 foot shoulders) for the section from the road closure gates near Frozen Lake to the Wyoming State Line (10.7 miles over the top) would still provide adequate safety balanced with the scenic values of the road. The use of additional pullouts along this part of the route would be preferable and safer than just a wider road.

RESOURCE IMPACTS:

Resources impacts fall into several categories:

Response to comment 5-4 (cont'd)

The design speed of the proposed bridge at Beartooth Ravine is 55 km/h (34 mph) and the design speed of the adjoining sections is 60 km/h (37 mph). Speed limit signs would be posted at these speeds. Speeds in excess of 72 km/h (45 mph) would not be legal. Appropriate wildlife crossing signage is part of the proposed mitigation. Most wildlife cross when traffic volumes are very low.

All build alternatives would be narrower than the AASHTO-recommended width.. Based on the traffic counts conducted on the highway, roughly 3% of the vehicles are greater than 10 m (30 ft.) in length. The single-unit bus was used as the design vehicle on the route because of the number of tour buses and recreational vehicles that use the route on a daily basis. These vehicles cannot negotiate most of the switchbacks without unsafely encroaching in the opposing lane. In 2025, an average of 100 buses or large recreational vehicles are predicted to use the route daily. Additional information on the design standards for the project is found in Appendix C. Appendix C includes additional discussion on foreslopes, clear zones, guardrail offsets, and paved ditches.

Response to comment 5-5

The problems described in the comment would be corrected in all build alternatives.

Response to comment 5-6

The standards used in designing the project are very similar to those used in YNP. For example, most roads in YNP are being reconstructed to a 9.0 m (30-ft.) width. The preferred alternative has widths of 9.0 m (30 ft.) in the western section and 8.4 m (28 ft.) in the eastern section, with a short transition of 9.6 m (32 ft.) at the west end of the project. The FHWA is required to follow 23 CFR 625.3, which requires state standards be used in the design of the proposed project. WYDOT probably would not consider ownership and maintenance of a road not reconstructed to state standards (see comment 5-7).

Response to comment 5-7

FHWA understands NPS's preference about road maintenance. Resolution of the road's ownership and maintenance is beyond the scope of the EIS.

Response to comment 5-8

Section 2.6, *Options Considered But Eliminated* of the FEIS includes additional discussion of why moving the NPS maintenance facility was eliminated from detailed study. Additional guardrail installations would increase long-term maintenance costs. The guardrail standard proposed for use on the Beartooth Highway is the WYDOT Box Beam guardrail. When compared to the W Beam guardrail, the Box Beam guardrail minimizes snow drifting and increases wildlife sight lines. The FHWA would attempt to minimize guardrail use during final design to the extent possible to balance safety concerns with minimizing environmental impacts.

Response to comment 5-9

The DEIS and FEIS indicate that the existing accident rate is lower than similar Wyoming roads. The design speeds selected for the project are low (60 km/h and 50 km/h [37 mph and 31 mph]), and are lower than the current operating speeds. The DEIS and FEIS discuss that operating speeds may increase in some locations. Improved sight distance and appropriate wildlife crossing signage would minimize impacts on wildlife. The FHWA completed an accident prediction analysis to compare the expected safety performance of the alternatives. The DEIS and FEIS discuss that accident rates are projected to be lower in the build alternatives than in the future No Action Alternative. This information is presented in Table 33, and in the *Long-term Changes in Operating Speeds and Accident Rates* section of section 3.11 *Transportation* of the DEIS and FEIS.

Response to comment 5-10

The DEIS and FEIS discuss why a 7.2-m (24-ft.) roadway was considered but eliminated from detailed study. A roadway narrower than the Preferred Alternative does not fulfill the purpose and need for the project because it would not accommodate current or future vehicle volumes or the vehicle types that currently use the road, or meet SNF's management goals. Alternative 6 has been identified as the preferred alternative because it fully meets all three needs for the project, and best balances safety, maintenance, land management, and traffic operation needs with avoidance and minimization of environmental impacts, including scenic quality.

Comment

Letter 5 continued

Response

5-11

Natural resources - Most scenic roads in the ecosystem have difficulties with revegetation. The Design Team should be complimented on their efforts to ensure appropriate revegetation. This is one of the more important elements in a scenic road and equally critical to the wildlife in the area. The careful use of topsoil and indigenous native species cannot be emphasized enough for the successful restoration of a road corridor. It is also the most economic approach. This road corridor contains some of the most fragile wetland (fen) and alpine resources in the ecosystem, it seems that the care in exploring revegetation options is important. The team has done an excellent job in testing the various types of strategies. There is still concern that the wider (32-foot option) creates too extensive an impact on wetland and particularly fen resources. A narrower 24 or 28-foot option would reduce these impacts. Even in the best of circumstances, impacts may take a very long time to be restored. It is also difficult to know whether the realignment at the Top of the World would restore properly. There would be more success if the topsoil was salvaged from the new alignment and re-used where possible. Has an alignment been considered which would restore more of the wetlands without going as far into undisturbed terrain? The Top of the World section is currently in wetlands and the new route gets out of a lot of that and actually introduces some curves into the section. We support moving out of wetlands whenever possible.

5-12

It also seems that further reduced speeds on some of the curves would further lessen impacts to vegetation. If widening could be accomplished to the outside of the curves, using as much of the existing asphalt as possible, then visitors would not view disturbance for the entire curve. In other words, we should use as much of the disturbed area as possible, except in reroute sections.

5-13

(see next pg)

Impacts to grizzlies, wolves and lynx seem to have been considered except that a wider road will increase speeds. An undulated clearing limit line would help re-establish cover for animals crossing roads and would also be more aesthetically desirable. Use of any netted fabrics, excelsior products or fertilizers should be carefully considered as it has been our experience that ungulates tend to entangle themselves or are attracted to these materials.

5-14

(see next page)

Cultural resources -The historic alignment is important to the integrity of the road, the preferred alignment deviates in several places with the historic alignment, notably in the loss of two curves near Beartooth Ravine. The bridge is expensive and does not follow the existing alignment. Although we would normally recommend increased use of walls, after examination of both accident records and personal observation of existing traffic, the bridge seems to be the safer option. If the design vehicle length could be reduced and/or more exceptions applied, the curvature higher on the road could be followed, lessening the impacts. Historic masonry headwalls should be retained and reused. New walls and overlook platforms should compliment the natural geology using rock facing which matches the color and geologic composition of the surrounding rock.

ECONOMICS:

5-15

(see next page)

A narrower 24 or 28-foot road for the entire section road would be less expensive and still provide an improved driving experience for the public. It would be less expensive to restore and less expensive to maintain.

5-16

(see p. A-27)

The scenery is an economic resource that will continue to provide revenues to surrounding communities in the future. The visual resource should be carefully protected and disturbance

Response to comment 5-11

Alternative 6, the Preferred Alternative, has been modified to have a 9.6-m (32-ft.) roadway from the project start to the Clay Butte Lookout turnoff, and a 9.0-m (30-ft.) road from the Clay Butte Lookout turnoff to the road closure gate to reduce impacts on wetlands and other vegetation types. Except for Alternative 4, none of the build alternatives would affect fens. See response to comment 5-10 and 5-16.

Numerous alternative alignments were considered in the Top of the World Store area to move the road out of wetlands and to minimize wetlands impact. The FHWA believes Option A would minimize wetland impacts and offer the most opportunity for high-quality restoration of wetlands affected by the existing road. Although both Option A and B would result in about 2 ha (5 ac.) of abandoned road segments, four different wetlands currently bisected by the road would be restored in Options A and B. Because of the more favorable climatic and moisture conditions at Top of the World Store area, the likelihood of successful wetland restoration and revegetation of other abandoned road segments is high.

Response to comment 5-12

The design speeds selected for the corridor were based on the selection criteria identified in Appendix C. Based on this analysis, a design speed of 60 km/h (37 mph) was selected for the section of roadway from the west end of the project to the Little Bear Lake and a speed of 50 km/h (31 mph) was selected from Little Bear Lake to the east end of the project. The 50 km/h (31 mph) design speed is below the minimum AASHTO recommended design speed, and would be an exception to the design standards. In addition, several locations along the project have further reduced speed curves, which minimize impact. These areas include the Beartooth Ravine and the switchbacks on the east end of the project. All curves were designed to address driver expectancy consistent with the remainder of the highway and minimize abrupt changes in the horizontal alignment. Additionally, in most locations they were located in areas where impacts to undisturbed vegetation were minimized. All build alternatives have been designed to use as much of the existing asphalt and existing disturbance as possible. As the final design proceeds, this will be refined to minimize impacts.

Curve widening would be applied to the inside of simple curves to accommodate vehicle tracking. If spiral transitions are used, then curve widening would be split evenly on both sides of the roadway. Minor adjustments would be made during final design to locate the proposed roadway within the existing footprint wherever feasible.

Response to comment 5-13

See response to comment 5-9 regarding increased speeds. The DEIS and FEIS discuss that an undulated clearing line is proposed as part of the mitigation. The DEIS and FEIS discuss that FHWA has conducted extensive revegetation test plots in three different areas to examine a wide range of revegetation issues, such as seeding rates, fertilizer types and amounts, organic amendments, and erosion control materials, such as netted fabrics or wood bark mulches. The revegetation materials would be selected to balance erosion control, particularly wind erosion, and successful plant germination and establishment with visual and wildlife concerns. Cotton netted erosion control fabric would be used where wind and water erosion hazard is a concern. Based on the revegetation test plots, the cotton netting decomposes quickly and tears easily. Because ungulate and grizzly bear use of the project area is significantly lower than Yellowstone National Park and degradable cotton netting would be used, minimal impact on wildlife is anticipated.

Response to comment 5-14

The DEIS and FEIS discuss that the bridge option at the Beartooth Ravine would be a safer option. The safety improvement would come from a more consistent design speed into and out of the Beartooth Ravine area. The DEIS and FEIS discuss that existing stone masonry or similar materials would be used on three new culvert headwalls and the bridge abutments (except for the Beartooth Ravine bridge). The DEIS and FEIS also discuss the proposed mitigation for retaining walls would use form liners or native stone.

Response to comment 5-15

Although a 7.2-m (24-ft.) or a 8.4-m (28-ft.) road for the entire project would be marginally less expensive to construct, these widths would not accommodate current or future vehicle volumes or current range of vehicle types, and would not support SNF's management goals. These width options do not fulfill the purpose and need for the project and are not practicable alternatives. Such options were discussed in Section 2.6, *Options Considered But Eliminated*.

Comment

Letter 5 continued

minimized. Visitors are delighted by the mountainous road, which allows the vegetation to be close to the road. As with park roads, most of the experience is based on views from vehicles so the roadside vegetation should be an extension of the resources within the project. Invading exotic species, miles of new guardrail or raveling plastics do not compliment a scenic roadside and frequently create issues for wildlife management.

5-17

In summary, a clear decision on what the experience should be on this magnificent American highway needs to be made prior to completing design and construction as that may have a direct impact on the width and other design details. The maintenance responsibilities of this historic highway should be a separate item.

/s/

Franklin C. Walker
Assistant Superintendent

Response

Response to comment 5-16

Alternative 6 has been identified as the preferred alternative because it fully meets all three needs for the project, and best balances safety, maintenance, land management, and traffic operation needs with avoidance and minimization of environmental impacts, including scenic quality. The scenery in the middle and background would not change in any build alternative. The DEIS and FEIS discuss the revegetation test plots that FHWA conducted to define the most suitable revegetation materials and techniques. The DEIS and FEIS also discuss the proposed revegetation plan that would include careful salvaging and replacing of topsoil, using native seeds, some of which would be collected from the Beartooth Plateau, and using appropriate erosion control to reduce the effects of wind erosion. Weed control measures also are discussed. Figure 2 of the FEIS indicates all unpaved disturbances associated with road construction would be revegetated, including the foreslope, graded ditches, and cut and fill slopes. These proposed measures would ensure that roadside vegetation would extend up to the edge of the shoulder or paved ditch. Implementation of BMPs for weed control would minimize the potential for weed establishment and long-term impacts. See the *Proposed Mitigation* section of section 3.6 in the FEIS for additional measures to prevent the introduction and spread of noxious weeds. Raveling plastics are not anticipated; see response to comment 5-13. Guardrail use will be minimized as much as possible; see response to comment 5-8.

Response to comment 5-17

The DEIS and FEIS discuss in detail the purpose and need for the project. Section 1.1 *The Proposed Project* of the FEIS includes additional information about the project's purpose and need. Alternative 6 has been identified as the preferred alternative because it fully meets all three needs for the project, and best balances safety, maintenance, land management, and traffic operation needs with avoidance and minimization of environmental impacts. See response to comment 5-2.

Comment

Letter 6

Response



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001

ES-61411
TAR/W.17WY6490 (Beartooth Wsd)

October 25, 2002

Bert J. McCauley, P.E.
Federal Highways Administration
Central Federal Lands Highway Division
555 Zang Street, Room 259
Lakewood, CO 80228

Dear Mr. McCauley:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) and the September 19 Social, Economic, and Environmental (SEE) Team Meeting discussion regarding reconstruction and road widths for the Beartooth Highway.

6-1

It is the position of the U.S. Fish & Wildlife Service (Service) that maintaining linkage (connectivity) for threatened and endangered (T&E) species home ranges in the Greater Yellowstone Area is a primary concern when reconstructing highways in the Yellowstone Ecosystem. This position has been expressed throughout the development and design of this project. Linkage can be adversely impacted by clearing zone width, traffic volume, traffic speed, and vehicle size. Increased road widths and shoulders can directly relate to an increase in clearing zone width, traffic volume, traffic speed and vehicle size. Consequently, the Service has maintained the position that minimizing road widths for reconstruction projects is generally beneficial and especially so as it relates to the lower end of the Beartooth Highway, specifically from the Top of the World Store and west to the project starting point (7.1 miles east of the junction of WY 296 - Chief Joseph Highway).

6-2

With this in mind, Terry A. Root of my staff, expressed his concern with the proposed 32-foot pavement width on this section during the SEE team meeting. However, as stated in the meeting, while the Service would prefer a 28-foot width for the lower section of the Highway, a 30-foot width would be acceptable provided that measures to minimize adverse impacts to linkage (as discussed and described during the August field trip) will be implemented and incorporated into final project design. These measures included revegetation plans for wildlife crossing areas, minimizing clearing widths, modifying guard rails to allow easier crossing and escape off the road, wildlife signing, and other mitigation factors previously addressed in the DEIS.

Response to comment 6-1

Alternative 6, the Preferred Alternative, has been modified to have a 9.0 m (30 ft.) roadway from Clay Butte Lookout turnoff to the road closure gate to minimize impacts. The effects on wildlife, particularly on threatened or endangered species, were identified as a significant issue early in the scoping process. Consequently, the FHWA minimized widths for travel lanes, shoulders, and foreslopes during preliminary design. The widths of the roadway elements proposed for the Preferred Alternative are the minimum widths that fulfill the project purpose and need.

Response to comment 6-2

The Preferred Alternative incorporates the suggested measures to minimize impacts. These measures are discussed in detail in the Biological Assessment. The *Proposed Mitigation* section of Section 3.5 *Wildlife* of the FEIS includes appropriate measures to minimize impacts at wildlife crossing areas.

Comment

Letter 6)

6-4

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have further questions on this subject, please contact Terry A. Root of my staff at the letterhead address or phone (307) 578-5932 and reference WY6490.1ar.

Sincerely,



Michael M. Long
Field Supervisor
Wyoming Field Office

cc: Statewide Habitat Coordinator, WGFD, Cheyenne, WY
Non-game Coordinator, WGFD, Lander, WY
WY Endangered Species Coordinator, Cheyenne, WY

Response

Response to comment 6-4

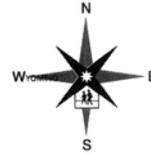
During final design, the FHWA would continue to consult with the USFWS to avoid and minimize impacts on wildlife.

Comment



Letter 7

State of Wyoming
Office of Federal Land Policy
Art Reese, Director



July 29, 2002

Mr. Richard Cushing
Environmental Planning Engineer
Federal Highway Administration
555 Zang Street (Room 259)
Lakewood, CO 80228

Re: Beartooth Highway (U.S. 212) Reconstruction – Draft Environmental Impact Statement
State Identifier Number: 98-094

Dear Mr. Cushing:

7-1

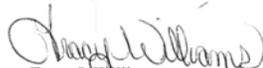
The Office of Federal Land Policy has reviewed the referenced draft environmental impact statement on behalf of the State of Wyoming. This Office also distributed the referenced document to all affected state agencies for their review, in accordance with State Clearinghouse procedures. Attached please find comment letters from the Wyoming Game and Fish Department and State Historic Preservation Office. While the State defers to its agencies' technical expertise in developing the State's position, the responsibility to articulate balanced official, unified State policies and positions lies with the Governor or the Office of Federal Land Policy.

7-2

According to the Game and Fish Department, the DEIS addresses the issues they have raised in previous comments; we appreciate their consideration. At this time, Game and Fish offers additional comments that we ask receive your favorable consideration. The State Historic Preservation Office looks forward to working with your staff in the creation and signing of a Memorandum of Agreement detailing mitigation measures. We ask that those comments also receive your favorable consideration.

Please continue to provide this office with either three hard copies or electronic copy (submit to OFLP@state.wy.us) of continued information for review and distribution to interested agencies. Thank you for the opportunity to comment.

Sincerely,


Tracy J. Williams
Planning Consultant

Enclosures: (2)
Wyoming Game and Fish Department
State Historic Preservation Office

Herschler Building, 1 West ♦ 122 West 25th Street ♦ Cheyenne, Wyoming 82002-0600
Phone (307) 777-3736 ♦ Fax (307) 777-3524
OFLP@state.wy.us

Response

Response to comment 7-1

Thank you for your comment.

Response to comment 7-2

Responses to comments from the Wyoming Game and Fish Department and the Wyoming State Historic Preservation Office are on the following pages.

Comment

Letter 8



DEPARTMENT OF STATE PARKS & CULTURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE

Barrett Building
2301 Central Ave.
Cheyenne, WY 82002

(307) 777-7697
FAX (307) 777-6421

July 10, 2002

Mr. Bert McCauley, P.E.
Project Manager
US Dept of Transportation
Federal Hwy Administration
Central Federal Lands Hwy Division
555 Zang St
Mail Rm. 259
Lakewood, CO 80228

Re: Beartooth Highway (Hwy.212), Segment 4,FHWA Proposed Reconstruction – Draft EIS
(SHPO File # 0598KLLK042)

Dear Mr. McCauley:

Christi Hutchison of our staff has received information concerning the aforementioned project. Thank you for allowing us the opportunity to comment.

8-1

We have reviewed the project report and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42). We concur with your determination that sites 48PA2310, the Beartooth Highway, 48PA2306, Long Lake Bridge, 48PA2307, Little Bear Creek eastern bridge, 48PA2308, Little Bear Creek western bridge, and 48PA2309, the Beartooth Lake Bridge are eligible for inclusion in the National Register of Historic Places.

8-2

We concur with your statement that the project will adversely affect the above mentioned sites and that the adverse affects need to be mitigated. We look forward to working with your staff, the Shoshone National Forest and the Advisory Council on Historic Preservation in the creation and signing of a Memorandum of Agreement detailing mitigation measures.

Please refer to SHPO project control number #0598KLLK042 on any future correspondence dealing with this project. If you have any questions, please contact Christi Hutchison at 307-777-6694 or me at 307-777-6311.

Sincerely,

Judy K. Wolf
Review and Compliance Program Manager

Jim Geringer, Governor



John T. Keck, Director

Response

Response to comment 8-1

The SHPO's concurrence on eligibility is noted in the FEIS.

Response to comment 8-2

The SHPO's concurrence on effect is noted in the FEIS. The FHWA, the SNF, the NPS, and the Wyoming SHPO, have developed a draft Memorandum of Agreement for mitigation of adverse effects to historic resources. The agencies are finalizing the Memorandum of Agreement, which will be included in the ROD.

Comment

Letter 9



July 22, 2002

WER 9028
Federal Highway Administration
Wyoming Department of Transportation
Draft Environmental Impact Statement
Draft Section 4(f) Statement
Wyoming Forest Highway 4
The Beartooth Highway (US 212)
State Identifier Number: 98-094
Park County

Art Reese, Director
Office of Federal Land Policy
Herschler Building, 1W
122 W. 25th Street
Cheyenne, WY 82002

Dear Mr. Reese:

9-1

These comments regarding the Draft Environmental Impact Statement for the Beartooth Highway (US 212) have been approved by the Director and are specific to this agency's statutory mission within State government which is "Conserving Wildlife, Serving People". In that regard, these comments are meant to, in association with all other agency comments, assist in defining the Official State Position. These comments defer to and are subordinate to the Official State Position.

Terrestrial Considerations:

The Draft EIS addresses the issues we have raised in previous comments, and we appreciate their consideration.

9-2

We offer the following additional suggestion for the proposed mitigation for grizzly bears on page 123. Minimizing the clearing of whitebark pine is desirable, but the road work will remove 14 acres of white bark pine. This lost acreage should be replaced off site, if possible, through whitebark pine plantings.

These comments are reflective of a specific agency mission only. These comments defer to and are subordinate to the Official State Position.

Headquarters: 5400 Bishop Boulevard, Cheyenne, WY 82006-0001
Fax: (307) 777-4610 Web Site: <http://gfs.state.wy.us>

Response

Response to comment 9-1

Thank you for your comment.

Response to comment 9-2

Section 3.6 *Vegetation, Timber and Old Growth* of the FEIS clarifies the clear zone requirements and the anticipated loss of whitebark pine forest. Whitebark pine is a component of the revegetation plan for forested areas. The proposed plantings would mitigate for the effects on whitebark pine forest.

Comment

Letter 9 continued

Response

Mr. Art Reese
July 22, 2002
Page 2 – WER 9028

Aquatic Considerations:

There are some inaccuracies in several sections as listed below:

- 9-3 Page 110: The Yellowstone cutthroat is *Oncorhynchus clarki bouvieri*.
- 9-4 Page 170: Fisheries and Aquatic Resources section suggests species that are not present in the drainage (i.e., salmon, mottled sculpin, whitefish). All affected drainages were actually devoid of fish in the past due to a series of downstream falls. All species presently there were introduced by stocking.
- 9-5 Presently, Beartooth Lake contains brook trout, rainbow trout, Yellowstone cutthroat, grayling, lake trout, white sucker, and lake chub.
- 9-6 Little Bear Lake contains brook trout and lake chubs.
- 9-7 Long lake contains brook trout, rainbow trout, Yellowstone cutthroat, and lake chub.
- 9-8 Little Bear Creek, Little Rock Creek, and Beartooth Creek all contain brook trout.
- 9-9 Bridge construction (page 56): We encourage language in that section that conveys: "bridge length will vary but will be sized to minimize riparian impacts and provide adequate protection against 100 year flood events."
- 9-10 We encourage amphibian inventories, and the use of Best Management Practices suggested to reduce impacts where amphibians are found.

Sincerely,

BILL WICHERS
DEPUTY DIRECTOR

BW:VS:as

These comments are reflective of a specific agency mission only. These comments defer to and are subordinate to the Official State Position.

Response to comment 9-3 through 9-8

The *Affected Environment* section of section 3.12 of the FEIS was revised to correct these inaccuracies.

Response to comment 9-9

The *Road and Bridge Reconstruction* section of Chapter 2 in the FEIS includes the similar language to that proposed.

Responses to comment 9-10

It was assumed that amphibians were present in wetlands, fens and riparian areas along the road. Bridges would span most wetland areas, and would provide for wildlife crossing beneath the bridges by providing connecting riparian areas along stream banks. The DEIS and FEIS discuss that Wyoming DEQ's BMPs would be used at stream crossings and culvert installations.

Comment

Letter 10

Response



American Wildlands

"Science-based conservation for the Northern Rockies."

July 18, 2002

Federal Highway Administration
CFLHD, Environment (Attn HFHD-16)
555 Zang Street, Room 259
Lakewood, CO 80228

Dear FHA Staff:

10-1

The following are my comments regarding the reconstruction of segment 4 of the Beartooth Highway DEIS. These comments are submitted on behalf of American Wildlands and the thousands of members we represent. In the following pages I have outlined our concerns, comments and questions regarding this project.

10-2

Our scoping comments submitted by Kim Davitt in October 2000 emphasized the importance of incorporating mitigation measures for wildlife migration and linkage routes into the reconstruction design of this project. In our comments we urged the FHA to consider planning and mitigation for wildlife movement and travel, but the EIS has failed to adequately do this. We also urged the FHA to look at the bigger picture and analyze the impacts of this highway on wildlife migration and linkage on a regional scale.

10-3

The DEIS repeatedly states that the no action alternative will continue to have impacts on wildlife and continue to fragment wildlife habitat. We agree with this assessment- a large busy road is bound to have impacts on wildlife species habitat and movement. But that does not mean that the proposed reconstruction and expansion should make the situation worse- on the contrary- it should make it better. The DEIS made it very clear that there will be impacts to wildlife (both long term and short term) due to the proposed work. It is disappointing that there is not more of a concerted effort to make the situation better for wildlife rather than worse. We urge you to consider this as you choose you action alternative.

10-4

We were pleased to see that there was discussion about the impacts that the proposed activity would have on wildlife movement and migration. Unfortunately, that discussion was very localized and failed to look at the regional picture. Is the Beartooth Highway acting as a serious barrier for animal movement? Are animals coming to this road and turning around due to its presence? How is this expansion/reconstruction going to effect regional migration movement for large animals like the grizzly bear? How is this area impacting movement for animals

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Response to comment 10-1

Comment noted.

Response to comment 10-2

The FHWA met with the SNF and USFWS to discuss wildlife crossings in the project area and regional wildlife movement. The *Proposed Mitigation* section of Section 3.5 *Wildlife* includes appropriate measures to minimize impacts at wildlife crossing areas.

Response to comment 10-3

The DEIS and FEIS discuss the unavoidable short-term and long-term impacts on wildlife. The *Proposed Mitigation* section of Section 3.5 *Wildlife* of the FEIS includes additional appropriate measures to minimize impacts at wildlife crossing areas. For example, during a field review of the preliminary design, one pullout was eliminated at a wildlife crossing. The location, size, and necessity of each proposed pullout would be reviewed during final design to minimize environmental impact. Landscaping and revegetation plans were developed at each wildlife crossing area to enhance wildlife movement and minimize vehicle conflicts. Bridges would provide for wildlife crossing beneath the bridges by providing connecting riparian areas along stream banks.

Response to comment 10-4

The Beartooth Highway is not acting as a barrier to wildlife movement either regionally or within the project area because existing operating speeds and existing daily traffic are low, and existing traffic during crepuscular periods are very low. The FHWA met with the SNF and USFWS to discuss each wildlife crossing identified in the project area. The proposed road design was modified to accommodate wildlife movement and to minimize impacts. The proposed modifications are described in detail in the Biological Assessment. The *Proposed Mitigation* section of Section 3.5 *Wildlife* includes appropriate measures to minimize impacts at wildlife crossing areas.

Comment

Letter 10 continued

Response

moving from Yellowstone National Park? This was not well analyzed in the DEIS. The DEIS also failed to try to find solutions to this animal movement problem.

10-5

We were disappointed to see that the DEIS failed to look creative solutions to improve wildlife habitat linkage and wildlife migration corridors. The DEIS makes it clear that habitat fragmentation will be increased because of widening of the road and admits that this could be a problem (page 114). It seems imperative that mitigation measures are put in place to deal with increased fragmentation.

10-6

DEIS states that improved road will increase traffic 3% annually. Where does this figure come from?

10-7

We are concerned that the proposed retaining walls will be a significant barrier to wildlife movement. Is there a way to make these less of a barrier?

10-8

The analysis area is incredibly important habitat for grizzly bears and is within the Yellowstone Grizzly Bear recovery zone. Some of the project is located within MS1 yet there seems to be little to improve the movement for bears in this area. Did the FHA explore all possible mitigation measures for improving grizzly bear movement?

10-9

In addition, this project is located within potential key linkage for lynx. We are very concerned about the impacts that this project will have on lynx. It is the cumulative impacts and long-term impacts that we fear will have significant impacts on the lynx.

10-10

The mitigation measures that are proposed on page 123 of the DEIS are a step in the right direction. But we urge you to take these a step further. How about signs that indicate when an animal is on the road (like the ones being tested by Western Transportation Institute south of Big Sky)? How about lower speed limits around areas that wildlife are known to cross?

10-11

We would like to conclude by saying that we urge you to make a decision on this project that will least impact wildlife habitat and movement. This is a very ecologically rich area that needs to be treated as such. This project must make all possible accommodations possible for wildlife movement. Thank you for giving us the opportunity to comment on this project. Please contact us with any questions.

Sincerely,

Deborah Kmon Davidson
Corridors of Life Program Coordinator

Response to comment 10-5

See response to comment 10-2.

Response to comment 10-6

Section 1.3, *Existing and Future Road Use and Traffic Conditions* of the DEIS and FEIS describe the basis for the projected 3 percent annual traffic increase. Growth in traffic on area roads, regional recreational trends, and population growth were examined.

Response to comment 10-7

Retaining walls are not proposed where wildlife crossings currently exist, and consequently, are unlikely to affect wildlife movement.

Response to comment 10-8

Portions of the project area provide some habitat for the grizzly bear. Habitat effectiveness is generally low due to the presence of the road, existing trails, and existing campgrounds. The *Proposed Mitigation* section of Section 3.5 *Wildlife* includes appropriate measures to minimize impacts on the grizzly bear.

Response to comment 10-9

Very little information is available for lynx populations on the SNF. Surveys in the past several years have not resulted in positive identification of lynx hair or prints. The proposed project is not likely to adversely affect the lynx. The *Proposed Mitigation* section of Section 3.5 *Wildlife* includes appropriate measures to minimize impacts on the lynx.

Response to comment 10-10

During a field review conducted with the SNF, USFWS, and FHWA in August 2002, all significant wildlife crossings were identified and analyzed. The review focused on avoidance and minimization of impacts in wildlife crossing areas by discussing modifications to design elements such as cut and fill slopes, guardrail, clearing widths, centerline shifting, blasting, pullouts and parking areas, and landscaping/vegetation. Appropriate wildlife crossing signage is part of the proposed mitigation. Because of the low traffic volumes anticipated when animals cross the road, signs such as those mentioned in the comment are not being considered. The speed limit in the area of wildlife crossings would be 56 km/h (35 mph) or less.

Response to comment 10-11

The *Proposed Mitigation* section of Section 3.5 *Wildlife* includes appropriate measures to minimize impacts on wildlife and wildlife movement.

Comment

Letter 11

Response

COMMENT SHEET
Please Print

Beartooth Highway Reconstruction Project
for a Portion of U.S. 212

Public Hearings
July 2002

Name: Nellie Israel
Address: General Delivery
City/State/Zip: Silver Gate, MT 59081
Representing: Beartooth Alliance

Do you wish to remain on/ be added to the mailing list to receive additional information on this project as it progresses?

- YES, I'd like a copy of the complete FEIS (300 to 400 pages).
- YES, but I'd would like to receive only newsletters and notice that the FEIS is available.
- NO, I would not like to receive any additional information.

- 11-1 Your Comments: I prefer Alternative 5. The 28 ft roadway width would mitigate the environmental damage & at the same time widen the road for increased safety.
- 11-2 The larger RV's, trailers, etc have to be considered.
- 11-3 I would like to see a bike path or accommodations for bikers along Longlake past Beartooth L. Could the
- 11-4 materials source be kept to the lower area? The one near Little Bear L. would disrupt a ^(large) alpine area.
- 11-5 I would prefer the work camp at the hwy junction of 212 + WY 296. Tourists & MT + WY natives need the Fox Cr. Campground space. It would also keep more people in the area, needed for economic good of Cooke City & Silver Gate while construction is going on.

Please drop your comment sheet in the "Comment Box." If you prefer, you may also mail your comments to: Rick Cushing, Environmental Planning Engineer, Federal Highway Administration (HFHD 16), 555 Zang Street, Suite 259, Lakewood, Co 80228.

Response to comment 11-1

The DEIS and FEIS discuss that Alternative 5 is not a practicable alternative because it would not accommodate recreational use from the project start to the road closure gate. Alternative 6, the Preferred Alternative, has been modified to have a 9.6-m (32-ft.) roadway from the project start to the Clay Butte Lookout turnoff, and a 9.0-m (30-ft.) road from the Clay Butte Lookout turnoff to the road closure gate to reduce impacts on wetlands and other vegetation types.

Response to comment 11-2

All build alternatives would accommodate larger RVs and trailers.

Response to comment 11-3

Alternatives 2, 4, and 6, (the Preferred Alternative) would accommodate bicyclists with a 0.9-m (3-ft.) or wider shoulder from the project start to the road closure gate. A separate bike path was not considered because of the additional environmental impact.

Response to comment 11-4

The FEIS indicates that the Island Lake moraine would be used only in the event that material from blasting and from Ghost Creek is not adequate.

Response to comment 11-5

Section 2.6, *Options Considered But Eliminated* of the FEIS includes a discussion of why a workcamp at the junction of U.S. 212 and WY 296 was not considered.

Comment

Letter 11 continued

- 11-6 I like the proposed alignment at the Top of the World Store & the bridge at the Beartooth Ravine. Maybe the old road could accommodate bikers there.
- 11-7 I appreciate the thought & work that has gone into this DEIS.

Thank you,
Melba Israel
Bartold Alliance Chem.

Response

Response to comment 11-6

At both locations, the abandoned road in Alternatives 2, 5 and 6 would be graded to match existing terrain and revegetated with native species. In the Top of the World Store area, portions of the abandoned road would be restored to wetlands and riparian areas. The proposed shoulder width at the Beartooth Ravine and the Top of the World Store would accommodate bicyclists safely.

Response to comment 11-7

Thank you.



Greater Yellowstone Coalition

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Mr. Richard Cushing,
 Environmental Planning Engineer,
 Federal Highway Administration
 555 Zang St. (Rm 259)
 Lakewood, CO 80228

July 23, 2002

Re: Draft Environmental Impact Statement: Beartooth Highway

Dear Mr. Cushing:

The following comments on the Beartooth Highway Draft Environmental Impact Statement (FWHA-FPWY-EIS-02-1-D) are submitted on behalf of the Greater Yellowstone Coalition. The GYC is a regional environmental organization established in 1982 with headquarters in Bozeman, Montana and offices in Jackson, Wyoming and Idaho Falls, ID. Our membership is nearly 12,000 with approximately 4,000 members in the 21 county area of the Greater Yellowstone Ecosystem. Many of our members have driven the Beartooth Highway; some of our members are residents of the Cooke City, Billings, Red Lodge and Cody areas.

12-1

We agree that the Beartooth roadway needs reconstruction to include resurfacing, widened driving lanes, drainage facilities, formal pull-outs, interpretive signage and other features to complement the original intent of The Yellowstone National Park (YNP) Approach Road. Segment 4 of the reconstruction project, includes the most environmentally sensitive features of the corridor. This road passes through and provides access to the unique vegetative and landform regimes of the largest extent of alpine terrain in the conterminous United States. The Beartooth Highway is the crown jewel in the Scenic Byway/All American Road system. GYC has reviewed the DEIS from the perspective of a public interest environmental organization. We have familiarized ourselves with the proposal, the process and design features incorporated into the build alternatives.

12-2

There are frequent references made in the DEIS to the American Association of State Highway and Transportation Officials (AASHTO) publication "A Policy on the Geometric Design of Highways and Streets", commonly referred to as the "Green Book". These design guidelines are adopted by states and by the Federal Highway Administration (FHWA) as national standards of roads on the National Highway System. The Beartooth Highway is neither a state highway, nor on the NHS. This is a Forest Road, owned and managed by the Federal Government, in this case the US Forest Service under maintenance contract to the National Park Service. We believe that the Central Lands Highway Division of the FHWA has the latitude to implement the design exceptions we are proposing, without negligence.

12-3

Our contention is bolstered by the knowledge of other mountain highways in the west that are functioning well under design elements that are clearly exceptions to those proposed by the preferred alternative displayed in the DEIS. We will document these examples in our

12-4

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 Wyoming Office: 330 East Snow King, P.O. Box 4857, Jackson, Wyoming 83001 • phone: (307) 734-6004 • fax: (307) 734-6019

Response to comment 12-1

Thank you for your comment.

Response to comment 12-2

The road is adjacent to large areas with similar vegetation and landforms, such as the Absaroka-Beartooth Wilderness, the High Lakes Wilderness Study Area, and the Line Creek Roadless Area. The Beartooth Highway is one of 28 All American Roads, a designation it recently received.

Response to comment 12-3

In accordance with FHWA's regulations (23 CFR 625), the road is being reconstructed to guidelines adopted by the FHWA and WYDOT. Many design exceptions to minimize environmental impact are proposed as part of all build alternatives, as discussed in subsequent comments. The 'Green Book' design standards apply to a variety of road classifications, not just roads on the NHS. Although it is true that this road is a Forest Highway (FH 4), it is also a U.S. Highway. See additional discussion in Appendix C.

Response to comment 12-4

Maintaining the road's All-American qualities is one of the three needs for the project. The Preferred Alternative uses many design exceptions to balance the transportation-related needs of the project with the need to maintain the road's All-American qualities and support the SNF's land management goals.

comments. Our belief and guiding template is that this reconstruction project must be accomplished with as little disturbance to the vegetation, soils, wetlands, wildlife and scenic values as is possible. We know as a society, that we place environmental stewardship high on the criteria for engineering achievement. The National Park Service, U.S. Forest Service, U.S. Army Corp of Engineers, U.S. Fish and Wildlife Service and the Federal Highway Administration must responsibly exercise their public trust by conducting this project with the care and consideration that matches the exceptional value of this road to the American people.

12-5

Our comments are organized sequentially beginning with **Chapter 1, Purpose and Need**. We have prepared a brief summary that expresses our concerns with the preferred alternative. We ask that the reconstruction project be conducted by selection of another alternative, with design modifications that will ensure further protection of the environmental and visitor experience values of the Beartooth Corridor.

12-6

Chapter 1, Purpose and Need: pg.1. The Beartooth Highway is maintained by the National Park Service through the Maintenance Division of Yellowstone National Park, under contract with the U.S. Forest Service. This is a Forest Highway owned by the Federal Government. The Wyoming Department of Transportation is neither a cooperating agency nor a stakeholder in the outcome of the reconstruction process. It appears from the public meeting discussions that the National Park Service will continue maintenance of the Beartooth Highway. For the State of Wyoming to assume maintenance responsibility it would have to capitalize and construct a service facility, obtain the necessary equipment for opening and ongoing maintenance functions, and hire additional supervisory and operating personnel. It is unlikely a maintenance program on a seasonal highway connecting two Montana communities would find favor with the state legislature or the voters in Wyoming. We don't believe that 23 CFR 625.3 applies in this special case.

12-7

1.1 The Proposed Project Pg. 3: "The project would include": The DEIS examines the elements of the project to varying levels of detail. We ask that the following design elements be presented in greater detail.

12-8

- Drainage structures. The impact of storm water drainage on soil and vegetation is a concern. Please indicated culvert and ditch discharge design parameters. Explain how points of discharge will be chosen to minimize impacts to adjacent soil and vegetation resources.

12-9

- Sub-surface drainage features and subgrade stabilization measures. Please provide an overview of the installation of these features and measures. For drainage features, detail work necessary in wetland locations and impacts (adverse or beneficial) of these measures on the resource.

12-10
(see next page)

- Provide a discussion of hard surface asphalt concrete pavement material. Estimate, by alternative, total road base and hard surface pavement needs. What fraction of this requirement will be met by recycling of existing road base and surface material? Discuss batch plant operations including air pollution mitigation controls, fuel type, transportation and storage, hot oil transportation, wash water filter and recycling, storm water controls, emergency spill contingencies and operation periods. Will coarse road base material and paving aggregate come from the same source? What consideration has been given to specialized asphalt amendments and aggregate

Response to comment 12-5

Since the DEIS, the width of the Preferred Alternative has been reduced to minimize impacts. A new section in the FEIS (*Techniques to Avoid and Minimize Impacts*) was added that describes impact minimization techniques.

Response to comment 12-6

Because the highway is outside of Yellowstone National Park, the NPS typically would not maintain it. A county or a state maintains the vast majority of Forest Highways. One of the purposes and needs for the project is to provide a roadway that can be reasonably maintained by a maintaining agency. The FHWA is required to follow 23 CFR 625.3 for the proposed project. The DEIS and FEIS indicate the WYDOT will consider accepting jurisdiction and maintenance responsibilities after construction is completed. The existing NPS maintenance facility could be used by either the NPS or WYDOT.

Response to comment 12-7

All the design elements listed have been carefully reviewed and designed.

Response to comment 12-8

Culvert and ditch discharge parameters are based on guidelines established in the FHWA Project Development Design Manual and the topography of the project. Discharge points are selected based on the existing topography and proposed outlet locations. Efforts are taken to maintain existing channel locations to minimize impacts on the surrounding vegetation.

Response to comment 12-9

Sub-surface drainage features would include installing underdrains in ditch flow lines and using base course to drain the pavement structure. Underdrains would be located in those areas where natural seeps occur or there is evidence of pavement distress due to subsurface water flows. Water would be intercepted with a perforated pipe/aggregate trench or permeable aggregate trench and carried under the roadway in either French drains or a series of PVC pipes. Current wetland hydrology would be maintained with the installation of pipe culverts or subexcavation backfilled with permeable material. Wetland mitigation sites are designed in cooperation with hydraulic engineers to ensure that adequate flows are developed to maintain the wetlands and prevent dewatering of upstream or downstream wetlands. Any impacts to wetlands would be mitigated in accordance with the requirements of the 404 permit and wetland mitigation plan.

size/shape configurations that would best serve the long term maintenance requirements for a roadway subject to extremes in temperatures and extreme freeze-thaw cycles.

- 12-12 • Please give cost estimates for pull-outs per alternative, with locations. Where will rest rooms be provided?
- 12-13 • What special environmental commitments are associated with this project? Explain how realignment will minimize environmental effects or enhance safety for a road with minimal accident occurrence (nineteen recorded accidents in nine years). What are the accident projections - are these meaningful when the base line of 0.95/1 million miles is so low?

12-14
(see next page)

I.I Pg. 4: Road Vertical and Horizontal Alignment: The DEIS states that "The current alignment and gradient of the road is irregular and has numerous sharp curves and abrupt transitions, with sudden dips and crests." We would restate a description of the road: "The current alignment and gradient of the road is indicative of an engineering achievement that, because of fiscal, time and equipment constraints chose, for the most part, to follow and respect the natural terrain, rather than gashing and carving a thoroughfare to serve for speeding tourists intent on reaching a destination." Despite the stated purpose on pg. 3 to maintain an "...efficient transportation link...", we believe that the reconstruction of the road can be accomplished without a "consistent alignment". We feel that conforming to "driver expectations" refers to a "cookie-cutter" standard of federal highway reconstruction that is inappropriate to this project. Drivers on the Beartooth Highway expect and accept the irregularities, limited sight distance, tight curves and transitions that are consistent with a scenic highway destination through mountainous terrain.

12-15
(see next page)

I.I pg. 5: Travel Lane Width: Highway segments adjoining the proposed reconstruction project incorporate design exceptions that are not considered in the preferred alternative. The Montana Segment 5 of the Beartooth Highway has varying width and curve radius. Lane widths are generally 12' but shoulders vary from 1' to 2' from the west gate to the east gate (measured 7/11/02). Guard rail offsets are less than 2'. Shoulder widths and guard rail offsets greater than 2' (cited as the "standard") begin only east of the east gate and continue into Red Lodge. Segment 2, which is the most recent (?) of the highway reconstruction projects has a 32' road width. However, width at the Clark Fork, Pilot Creek and Fox Creek Bridges included 12' driving lanes, 2' paved shoulders and < 1' bridge rail offset (measured 7/19/02). "Standard" shoulder widths and guardrail offsets for Segment 4 cannot be justified based on adjoining sections of the Beartooth Highway. Other examples that closely resemble the existing conditions of Segment 4 of the Beartooth Highway in design width, curve radius and sight distance include: Trail Ridge Road in Rocky Mountain National Park, Colorado State Highway 82 between Aspen and Twin Lakes, and year around highway U.S. 550, Red Mountain and Molas Passes in Colorado's San Juan Mountains. (Personal observation including work assignments on Trail Ridge and US 550.) U.S. 550 and Trail Ridge Road are also designated "All American Roads". Each of these corridors are under design jurisdiction of the Central Federal Lands Highway Administration; the same agency developing the Beartooth Project. The DEIS should display comparisons of these highways, and their design elements.

Response to comment 12-10

The proposed structural section for the road is based on geotechnical analysis of the subgrade soils and an analysis of the repetitive traffic loads on the facility. The proposed surface for the project would consist of hot asphaltic concrete paving (HACP) over aggregate base course (ABC). The recommended material depths are 75 mm (3 in.) HACP over 300 mm (12 in.) ABC from the beginning of the project to past Island Lake turnoff and 75 mm (3 in.) HACP over 225 mm (9 in.) ABC from the Island Lake turnoff to the WY/MT state line. The total road base and asphalt pavement quantities for each build alternative were estimated and used to develop the construction cost estimates presented in the FEIS. Existing road base and surfacing material would be pulverized and used as temporary surfacing. The in-place quantities are not adequate to incorporate as ABC in the structural sections. Batch plant operations would comply with all local, state, and federal regulations. The contractor would determine the type of batch plant. It is estimated that the batch plant would be in operation primarily during daylight hours. Materials for the project would be generated on site during the earthwork phase of the project or materials sources discussed in the DEIS and FEIS. Asphalt recommendations would be based on an evaluation of the climate and available asphalt oils and performance evaluations of current asphalt mix designs. Aggregate shape and size configurations would be based on an analysis of the rock available at local material sources.

Response to comment 12-12

The cost estimates provided in the FEIS for each alternative include the cost of the pullouts. Preliminary pullout locations are presented in the *Final Recreation Report*, available at the locations on p. 2 of the Abstract. Pullouts common to all alternatives are shown on Figure 27 of the FEIS. No restrooms are currently planned at any pullout.

Response to comment 12-13

A summary of environmental commitments is presented in Chapter 4. Environmental effects of the alternatives are presented in Chapter 3. Current accidents are discussed in Chapter 1 and predicted future accidents associated with each alternative are discussed in Section 3.11, *Transportation*. The current accident rate may be low because of lack of communication facilities.

Currently, vehicles track into oncoming lanes at most curve locations. With increased traffic, vehicle conflicts will increase with the existing roadway widths. The FHWA completed an accident prediction analysis to compare the expected safety performance of the alternatives. The DEIS and FEIS discuss that accident rates are projected to be lower in the build alternatives than in the future No Action Alternative. This information is presented in Table 33, and in the *Long-term Changes in Operating Speeds and Accident Rates* section of section 3.11 *Transportation* of the DEIS and FEIS.

Response to comment 12-14

The current alignment and gradient of the road generally follows the existing terrain. The current alignment and gradient was adequate for the vehicles types and volumes when the road was constructed. However, it is substandard by today's vehicle requirements, especially in light of a projected doubling of traffic volumes in 20 years.

In 85 percent of the route, the proposed alignment matches the existing alignment. The large number of design exceptions and low design speeds used in project design make the project different from most highway reconstruction. There is no evidence that drivers "expect and accept" the irregularities in the alignment. Park service personnel have had to drive some visitors off of Segment 4 because they were afraid to proceed. Consistent geometry is crucial to provide a roadway that meets the driver's expectancy. Inconsistent curve radii can cause sudden reductions in speed and do not conform to driver expectations, which can adversely affect vehicleoperation and safety. A predictive analysis of the accident locations on the highway confirms this, for example the Beartooth Ravine area. (See Section 3.11 of the FEIS). Multiple design iterations and field reviews were completed to ensure the reconstructed road would maintain the high scenic qualities of the existing road. Also, see Appendix C for further discussion of vertical and horizontal alignment design controls.

Response to comment 12-15

Appendix C includes additional discussion on the shoulder widths and guardrail offsets. Studies have shown that reductions in barrier offset increase sideswipe accidents and make drivers move to the center of the road because drivers tend to shy away from barriers. The proposed 0.6 m (2 ft.) offset is the minimum acceptable offset. The recommended offset for a design speed of 60 km/h (37mph) is 1.4 m (4.6 ft.) and for a design speed of 50 km/h (31 mph) is 1.1 m (4 ft.)

Clark Fork, Pilot Creek, and Fox Creek Bridges are considered substandard in width and are being undermined by the flows in the streams. FHWA has recommended to the Steering Committee that they be replaced in the future. Segment 5 is also substandard, but at this time there are no plans for reconstruction. Montana Congressional staffs have indicated they would like to reconstruct Segment 5 as well.

Design elements for the Beartooth Highway were established based on the information presented in Appendix C. According to AASHTO criteria, the Beartooth Highway is a rural minor arterial that provides a link among cities, larger towns, and other traffic generators (such as major resort areas) and is capable of attracting travel over long distances. Rural minor arterials also integrate interstate and intercounty service. The Beartooth Highway primarily serves regional travel between Red Lodge, Montana and Yellowstone National Park, consistent with an arterial classification. In addition, the Beartooth Highway also carries the designation as a Scenic Byway and has been designated an All American Road by the FHWA.

Comment

Letter 12 continued

Response

12-16 We recognize the value of stabilized shoulders that provide for ravel protection to the paved road base. We support the reconstruction with 12' driving lanes. **We do not support reconstruction with additional 4' paved shoulders. We do not support 2' guardrail offsets, unless the guardrail offsets are credited as paved shoulders.** The constructed width of the proposed roadway in the preferred alternative, will also provide for paved offsets at sections of retaining walls, guardrails and bridges. The addition of paved ditches and foreslope will result in a varying total constructed roadway width between about 46' and 62' for all build alternatives. Cleared right of way will increase this width to even greater dimension. The reconstructed Beartooth Highway corridor will easily be wider than the existing road by a factor of 2 or 3 times. **This impact is significant and one that is not adequately displayed in the alternatives that emphasize driving lane and shoulder widths of 28 to 32 feet. Please provide total constructed roadway widths by alternative for the following component sections:**

- Beartooth Ravine
- Beartooth Lake Grade to Top of the World Meadows
- Top of the World Meadows
- Island Lake past Little Bear Lake
- Long Lake to West Gate
- West Gate to West Summit
- West Summit to East Summit
- East Summit to Montana Line

12-17 It is stated that 4' shoulders are necessary to provide for bicyclist and pedestrian use. Currently the vast majority pedestrians walk on the roadway at or near existing pullouts to play in summer snowbanks, take photographs and view wildlife, mostly marmots and mountain goats. Construction and reconstruction of pullouts will alleviate most pedestrian use of the roadway. Backpackers do not and would not begin to use the reconstructed highway for travel. The backpacking experience does not favor motor vehicle routes. Pedestrian congestion at the Beartooth Lake Bridge can be mitigated by a pedestrian bridge over the outlet and pedestrian cross walks and signage on the east side of the new highway bridge. Pedestrian use of the Long Lake outlet area can be provided for by guard rails from the east pull-outs to the new bridge and placing a paved pedestrian walk behind the guard rails.

12-18 Motor vehicles share the road with bicyclists. Wider driving lanes and other reconstruction features will improve the current situation. On many down grades, bicycle speeds are similar to motor vehicle traffic and bicyclists will benefit from the new surface as well as the broader travel width. **To our knowledge, there have been no reported bicycle-motor vehicle accidents during the 9 year period of accident statistics cited in the DEIS.**

12-19 1.1 Pg. 6: **Drainage Facilities:** We generally support the reengineering of drainage facilities.

- 12-20 • Explain how points of discharge will be chosen to minimize impacts to adjacent soil and vegetation resources.
- 12-21 • For drainage features, detail work necessary in wetland locations and impacts (adverse or beneficial) of these measures on the resource.

12-22 At the Top of the World Store Meadows alignment, **please discuss engineered drainage features (such as French Drain and culvert placement) that would minimize additional**

(see next page)

Response to comment 12-15 (cont'd)

The highways cited for comparative purposes are each unique based on the location and function. It is not appropriate to compare these facilities based solely on the All American road designation and not review all the elements that contribute to their design.

Response to comment 12-16

The typical section (Figure 2 in the FEIS) was modified to reduce the shoulder width in the Preferred Alternative to 0.9 m (3 ft.) from the Clay Butte Lookout turnoff to the road closure gate and is presented in the EIS. The total disturbed area by alternative is presented in the DEIS and FEIS in *Chapter 3, Affected Environment, Environmental consequences, and Mitigation*, which takes into account the roadside ditches and foreslopes. The reconstructed roadway widths are detailed in the typical sections in *Chapter 2, Alternatives*. The requested detail is not needed to disclose effects or to compare between alternatives.

Response to comment 12-17

In the AASHTO Green book, the minimum recommended shoulder width to safely accommodate bicyclist is 1.2 m (4 ft). At this width, the shoulder cannot be designated as a bike lane. In order to balance environmental impacts, this width has been reduced to 0.9 m (3 ft.) in the Preferred Alternative and would require an exception. A pedestrian walkway is planned on the Beartooth Lake Outlet Bridge. Additional information on shoulder widths is presented in Appendix C.

Response to comment 12-18

There have been no reported bicycle-motor vehicle accidents. Because of the narrow travel lanes and lack of shoulders, current bicycle use is very low. Wider travel lanes and shoulders would better accommodate bicyclists, which are expected in increasing numbers based upon current recreational trends.

Response to comment 12-19

See response to comment 12-8.

Response to comment 12-20

See response to comment 12-8.

Response to comment 12-21

See response to comment 12-8.

Comment

Letter 12 continued

Response

vertical alignment requirements. Also discuss possible use of more viscous asphalt mix components to minimize freeze-thaw pavement deterioration.

12-23

The fact that some snow drifts in the alpine sections are 12- 36' deep does not call for large drainage structures. The large volume pulses of melt water in the late spring and early summer comes from the ambient snowcover and ground water saturation. The deep snow drifts are actually small frozen reservoirs that release water over long duration. There is a need for improved drainage facilities. Culverts and ditches should be located and sized accordingly.

12-24

1.1 Pg. 6: Pullouts and Parking Areas: Construction/reconstruction of these features are an important component of the project. Careful consideration of placement and sizing is important. Environmental impacts of these features must be considered and weighed against location and costs. Planning for parking areas must include short hiking trail construction so as to preclude social trail establishment that is evident at the present Summit parking areas. **Locating pull-outs should be done in concert with SNF recreation planning personnel.** Pleasant, safe and convenient pull-outs will help fulfil the intent of this scenic highway reconstruction. **Please indicate pull-out and parking area locations in greater detail for each alternative.**

12-25

1.1 Pg. 7: Bridges: We reluctantly concur with the necessity to reconstruct the current historic bridges. We will discuss bridge widths in context with the road purpose and use and bridges on Segment 2.

12-26

1.1 Pg. 7: Needs Associated with Maintenance: The statement that the: "...goal of the proposed reconstruction is to provide a roadway with design features compatible with current maintenance equipment and techniques, affording safe and efficient maintenance practices," **must not trump** the element of "Implementing environmental commitments to reduce or mitigate environmental impacts", as included in the proposed project goals. **(1.1 pg.3)** The reconstruction of the Beartooth Highway will, in any build alternative, help facilitate more efficient and effective summer maintenance and spring opening operations. **Current maintenance equipment capability and techniques are adequate for the task. Assured funding and allocation mechanisms are the most important elements of an improved maintenance program. (Personal communication with Beartooth Highway Maintenance Supervisor, 7/10/02.)**

12-27
(see next page)

1.1 Pg. 9: Under **state ownership**, the State of Montana would assume maintenance responsibilities for Segment 1, from the YNP Northeast Entrance to the Wyoming State Line. This would require establishment of a maintenance patrol at Cooke City for 8 miles of road. The State of Montana would likely be unwilling to accept this unnecessary expense and commitment. Additionally YNP performs routine winter maintenance on the Mammoth to Northeast Entrance road as a component of its statutory obligation to maintain access to Cooke City. Given these realities it does not make sense for Segment 1 to be maintained by the State of Montana. **These factors should be displayed.**

12-28
(see next page)

With continued **federal ownership**, the Department of Interior would maintain the highway, including spring opening. The certainty of an efficient maintenance future is assured through the implementation of a build alternative and specific legislated funding for such maintenance

Response to comment 12-22

Culvert sizes near the Top of the World Store were selected based on the minimum sizes required to convey the expected drainage at each culvert location. Different culvert material types would be evaluated during final design. For example, elliptical pipes are proposed instead of circular pipe at some locations adjacent to wetlands. In another area, the profile of the roadway would be raised 1 m (3 ft.), raising the bottom of the culvert and maintaining the hydrology of the adjacent wetland. Asphalt oil for pavement design is selected based on the climate, which considers anticipated freeze-thaw cycles.

Response to comment 12-23

Culvert size was based on the 50-year storm event, not the depth of snow drifts. Accommodating this size storm event would prevent overtopping of the road and/or culvert failing during major storms. Culvert spacing and ditch flow depths and velocities for the graded ditches were determined using the 50-year storm event to account for the high snowfall in the region. Inlets along paved ditches were spaced to ensure that flow spread occurs within the ditch and does not overtop into the roadway. Culverts were sized and located to maintain the existing outflows.

Response to comment 12-24

All pullouts and parking areas have been sized and located in coordination with the SNF, generally where existing pullouts are located. The location, size, and necessity of each proposed pullout would be reviewed and possibly modified during final design to minimize environmental impact. Impacts associated with parking areas and pullouts are included in the impact assessment. Trails beyond the parking area or pullout would be the SNF' responsibility. *The Pullouts, Parking Areas, and Access Road Intersections* section of Chapter 2 discusses currently proposed pullouts and parking areas and Figure 27 shows pullouts and parking areas common to all build alternatives. Figure 26 shows how pullouts or parking areas may be relocated to minimize impacts. See response to comment 12-12.

Response to comment 12-25

Comment noted.

Response to comment 12-26

Alternative 6 (the Preferred Alternative) has been identified as the preferred alternative because it fully meets all three needs for the project, and best balances safety, maintenance, land management, and traffic operation needs with avoidance and minimization of environmental impacts. Also, see response to comment 12-6.

Comment

Letter 12 continued

Response

activities. Continued Department of Interior maintenance would also preclude the unnecessary construction of a maintenance camp at the Sunlight Road Junction. We support the continued and codified maintenance responsibilities remaining with the DOI through use of National Park Service personnel, equipment as well as retention of the existing maintenance facility on the highway just below Clay Butte.

12-29

1.1 Pg. 10: **Snowplowing Difficulties:** There is no doubt that spring opening the Beartooth Highway is a difficult operation. Other winter-closed National Park Service maintained highways have similar characteristics (Trail Ridge Road- Rocky Mountain National Park; Going to the Sun Highway, Glacier National Park; Cayuse and Chinook Pass, Mount Rainier National Park; and Tioga Pass, Yosemite National Park). The matter of road edge delineation is an operational maintenance issue, not a design feature. There are a number of options for road edge delineation for spring opening. Wider travel lanes and pull-outs with any build alternative will accommodate periodic plowing and the temporary snow storage required at opening.

12-30

1.1 Pg. 10: **Needs Associated with Land Management Goals:** One of the stated purposes (pg. 3.) is to support management of National Forest lands adjacent to the road. In fact, since the road predated Shoshone National Forest management plans by at least 50 years, we believe the Forest Service is tailoring its management to the presence of the road. Be that it is may, the value of these public lands for recreation, wildlife habitat and clean water (the latter two elements should be mention in this context in the FDEIS) is unquestioned.

12-31

We do not believe that, apart from the vicinity of the outlets of Beartooth Lake and Long Lake, special provisions must be made for pedestrians or bicyclists along the highway. Pull-outs will limit parking along the road shoulders, ATVs and snowmobiles are prohibited by law from using the highway travel surfaces.

12-32

We agree that the All-American Road "...has one of a kind features that do not exist elsewhere", and that "...(the road) has intrinsic qualities of national qualities of national significance - natural and scenic", and "...that it provides an exceptional traveling experience so recognized by travelers that they would make a drive along the highway as a primary reason for their trip". In reviewing the DEIS, there are no references to the management, protection strategies or recommendations for interpretation, that are said to be contained in the Corridor Management Plan.

12-33

1.2 Location and History:

1.2 Pg. 12: **History** Reference is made to the passage of the Transportation Efficiency Act for the 21st Century. As a High Priority Project additional funding became available for environmental review, planning design and reconstruction of segment 4. Please provide the amount of funding that was available and the amount spent thus far, including the pavement rehabilitation, environmental review, planning and design. Please also state the amount of survey and design work that has been accomplished on the preferred alternative #6. (The survey stakes are placed for the realignment options and widening.) To what degree has design work been devoted to the other build alternatives? We are concerned that the level of survey and design attention devoted to alternative # 6 may constitute a pre-decision commitment of these funds.

1.3 Existing and Future Road Use and Traffic Conditions:

Response to comment 12-27

One of the purposes and needs for the project is to provide a roadway that can be reasonably maintained by a maintaining agency. In its current condition, the road is not reasonably maintainable. The comments on jurisdiction are speculative. The decision on jurisdiction of Segment 1 and Segment 4 would be decided after both projects are completed. Also, see response to comment 12-6.

Response to comment 12-28

The Department of the Interior is currently not allocated funding for road maintenance. Section 2.6, *Options Considered But Eliminated* of the FEIS indicates that moving the NPS maintenance facility has been eliminated from detailed analysis.

Response to comment 12-29

The FEIS clarifies the issue of snowplowing and road edge delineators. Wider travel lanes, shoulders, and pull-offs would help accommodate snow plowing operations and snow storage, especially while the road is open to traffic. Maintenance standards must be considered in design features pursuant to 23 CFR 625.3.

Response to comment 12-30

The DEIS and FEIS discuss wildlife, recreation and surface water resources.

Response to comment 12-31

The DEIS and FEIS discuss in detail the need for wider shoulders from the start of the project to the road closure gate. A trail is proposed from a pullout east of Beartooth Lake Bridge to the outlet bridge to accommodate pedestrian traffic in the vicinity.

Response to comment 12-32

The Corridor Management Plan is independent of the proposed reconstruction project, but provides guidance on interpretation and recreational facilities along the road. The Plan was used in developing the proposed project, such as location of interpretive areas like at the Lake Creek bridge. Other interpretive sites are discussed in Section 3.4 of the FEIS.

Response to comment 12-33

The amount of survey and design work was the same for all build alternatives. Survey stakes were placed for all build alternatives for a field review in 2001. The DEIS and FEIS provided the same level of analysis for all alternatives.

Comment

Letter 12 continued

Response

12-34

1.3 Pg. 14: **Traffic Volumes, Speeds and Accidents.** The traffic counts characterized vehicle type and included motorcycles. Since motorcycles have shorter wheel base, width and less turning radius than conventional automobiles, they constitute the same unique classification as the 5% of vehicles that are larger in wheel base and turning radius. In my observation, a significant fraction of vehicle use is by motorcycles. **Please indicate what percentage of vehicle traffic is attributable to motorcycles. Also indicate if there are differences in east or west bound traffic counts, and what those differences are.** The growth factor used to determine projected Seasonal Average Daily Traffic is only an educated guess, during a similar period visitation to YNP only increased about 1% per year. ("...Park Visitation...Road Killed Wildlife..."; Gunther et al, 1999. Increased visitation through the NE Entrance reflects more consistent gate staffing and the exploding interest in snowmobiling in Cooke City. **Based on these uncertainties we question the disproportional number of buses that are anticipated in 2025 (100/day).**

12-35

The accident rate of 0.95 per million vehicle miles indicates that segment 4 averages slightly more than 2 reported accidents per season. With five of these accidents occurring in the ravine section (three attributed to excessive speed), a driver on the Beartooth Highway is on a pretty safe stretch of road. This is a low accident rate, given that there is no accident reduction effort, no speed limit signs or even law enforcement presence on the Wyoming section of the highway. Even unreported accidents must be minor in nature and did not pose injury, fatality or property damage. Controlled opening and closing dates to avoid winter hazards will continue to contribute to the low incidence of accidents. **The reconstructed highway will not necessarily be a safer road when judged by the accident rate on the existing highway. Increased design speed will increase the number of accidents and will probably account for more injuries.**

12-36

1.5 Pg. 18: Table 3. Please explain how the necessary state and federal permits will be granted under applicable environmental laws. Will operation plans be developed to support Federal and State permit applications. Will these applications stand alone (and available for public review) or are they tiered to this DEIS without further documentation.

Chapter 2. Alternatives

2.1 Alternative Development;

12-37
(see next page)

2.1 Pg. 21: **Project components and options.** The DEIS states, under this discussion, that "As lead agency the FHWA (*under NEPA*) has the responsibility to select an alternative that balances providing safe and efficient transportation with minimizing environmental impacts." The DEIS displays a low accident rate, as a measure of specific safety related consequences experienced in driving the Beartooth Highway. In the DEIS there are references to how the Beartooth Highway "...provides an exceptional traveling experience so recognized by travelers that they would make a drive along the highway a primary reason for their trip", and that "The Beartooth Highway is primarily a recreational road that connects the northeast entrance to YNP with Red Lodge, Montana and Cody, Wyoming". These statements do not indicate to the public (or agency decision-makers) that the Beartooth Highway is either inefficient or unsafe. **It would appear that the FHWA could fulfill its mandate under the no-action alternative. In this context, the rationale for not selecting a reconstruction**

Response to comment 12-33 (cont'd)

The 1998 Department of the Interior and Related Agencies Appropriation Act made available \$2 million for snow plowing, and \$10 million for rehabilitation and minor widening of segment 4. With the passage of the Transportation Efficiency Act for the 21st Century later in 1998, the Beartooth Highway was identified as a High Priority Project and an additional \$17.5 million became available for the environmental review, planning, design, and reconstruction of segment 4. Approximately \$6.3 million has been spent on engineering and environmental studies, and \$2.3 million on the pavement preservation project.

Response to comment 12-34

The percentage of vehicle traffic attributable to motorcycles was not recorded for the traffic surveys. There was little difference between west-bound traffic and east-bound traffic levels. To determine a growth rate, the FHWA completed traffic studies on area roads, examined growth trends in the region and reviewed visitor trends to establish a future annual growth rate. Visitation in YNP was only one of the variables used to estimate future traffic volumes. As the DEIS and FEIS discuss, future traffic volumes based on a growth rate of 2 to 4 percent would require the same design standards as those selected for the project. The number of buses anticipated to use the road in 2025 was calculated by multiplying the number of buses currently using the road by the projected growth rate. The proportion of buses, therefore, would remain as it currently exists.

Response to comment 12-35

It is important not to confuse existing safety with future safety. With increases in traffic volumes, vehicle conflicts will increase under the future No Action Alternative. The FHWA believes the reconstructed roadway would be safer in the long term. The FHWA completed an accident prediction analysis to compare the expected safety performance of the build alternatives. The DEIS and FEIS discuss that accident rates are projected to be lower in the build alternatives than in the future No Action Alternative. This information is presented in Table 33, and in the *Long-term Changes in Operating Speeds and Accident Rates* section of section 3.11 *Transportation* of the DEIS and FEIS.

Response to comment 12-36

The FHWA or its contractor would obtain necessary permits and approvals shown in Table 3of the FEIS, by application where necessary. Any environmental analysis needed for permit or approval is disclosed in the FEIS.

Comment

Letter 12 continued

Response

alternative that follows existing center line alignment with minimum widening and no paved shoulders must be explained in greater detail.

12-38

We understand that the Beartooth Highway is an asset to the enjoyment of the Greater Yellowstone Ecosystem, and as such should be maintained in a fashion that minimizes environmental impacts, while preserving the "...exceptional traveling experience..." and "...primary function as a recreational road...". Thus, as we have stated, we support the reconstruction project to include resurfacing, widened driving lanes, drainage facilities, formal pull-outs and other features to complement the original intent of The Yellowstone National Park Approach Road. Our comments are designed to place emphasis on the responsibility of the FHWA (and cooperating agencies) to minimize environmental impacts.

12-39

2.1 Pg. 22: Design Speed "Design speed is a selected speed used to determine the various geometric design features of a roadway (and Actual vehicle operating speeds may safety exceed the design speed in areas where the alignment, grade and sight distance are favorable." Table 2 (pg. 15) shows current operating speeds that meet or exceed design standards for each of the proposed build alternatives. Citing "an efficient transportation link" as a reason to reconstruct this segment, implies driving speed/time as needing improvement. This is not the case. Since this roadway is recreation feature of the public lands, and serves as access to YNP, speed should only be a safety consideration; this design element is documented as sufficient with the no action alternative in the DEIS. (See: Tables 2 and 4 comparison)

12-40

Speed does not appear to be a factor in the accident rates, except for the 3 accidents (in 9 years) in the Beartooth Ravine. There are no posted speed limits along segment 4 and no speed enforcement program. Using the design speed criteria to change the existing geometric design features of the roadway cannot be justified. Please indicate why using design speed criteria is necessary for the alignment options and deviations from existing alignment in the switchback segments of the project. Increased driving lane width and smooth, uniform pavement features in any of the build alternatives will increase operating speeds beyond those of the no action alternative.

12-41
(see next page)

21. Pg. 23: Roadway Width We support the reconstruction of the Beartooth Highway with 12' driving lanes. We believe that shoulder width criteria must balance the environmental impacts of excessive roadway widths with conventional highway design and construction methods. The reconstruction project will result in stabilized roadway shoulders along the entire length. The paved width of these shoulders should be minimized through design exception to reflect the seasonal nature of the roadway, traffic volumes, design speed and the sensitive wildland habitats of our public lands. We believe, as do other agency persons, who wish not to be quoted, that environmental protection of roadside habitat is best accomplished by minimizing disturbance rather than relying upon reclamation. In areas with retaining walls, bridges and/or guard rails, the guard rail offset shown as 2' should serve as the paved shoulder. Other recently reconstructed segments of the Beartooth Highway, as we have shown, incorporate guard rail and bridge railing offsets as paved shoulder features.

12-42
(see next page)

2.1 Pg. 23 Alignment: Alignment options indicate that 7.5 miles of roadway areas would be subject to realignment. This is 40% of the entire project length. The preferred alternative #6 shows realignment to 5.5 miles or 29% of the project length. We do not support

Response to comment 12-37

The provided DEIS citations provide one reason why the road is an All-American Road. The DEIS and FEIS discuss that the existing road does not accommodate existing traffic and is difficult to maintain. As the DEIS and FEIS discuss, the No Action Alternative does not fulfill the purpose and need for the project. The FEIS includes additional discussion under the Rationale for the Preferred Alternative section of Chapter 2. See response to comment 12-35.

Response to comment 12-38

All efforts have been made to preliminary design and more efforts would be made in final design to minimize environmental impacts to the extent possible. See Chapter 2 under Techniques to Avoid and Minimize Impacts.

Response to comment 12-39

The design speed for this project was established based on the following: 1) application of AASHTO criteria, 2) a spot speed study, 3) analysis of the existing curvature, and 4) a review of previously completed projects on adjacent sections. The selected design speed is consistent with adjacent segments of the highway. For complete discussion on design speed, see Appendix C of the FEIS. An efficient transportation link was not meant to imply "driving speed/time as the needed improvement" but one that handled the mix of traffic effectively and does not discourage use. Nowhere in the DEIS and FEIS does it state that FHWA intends to increase design speeds for the sake of efficiency.

Response to comment 12-40

Design speed criteria are used to determine critical design features such as stopping sight distance and minimum rate of curvature. As discussed in Appendix C, the rate of horizontal curvature is determined by the design speed and maximum superelevation or tilt of the roadway on curves. Based on this criterion, the existing alignment was modified to meet the minimum curve radii for the design speed. Because two design speeds have been established for the project, two minimum radii were selected; for 60 km/h (37 mph) the minimum curve radius of 135 m (440 ft.) was used, for the 50 km/h (31 mph) the minimum curve radius of 90 m (300 ft.) was selected. At the switchbacks, the curve radius of 30 m (100 ft.) was selected to best match the existing alignments, improve sight distances, and help maintain the character of the roadway.

In most locations, the existing switchback curvature was matched. Additional information on design speed determinations at Frozen Lake, Albright Curve and the Bar drift was presented on pages 26 and 27 of the DEIS and in Appendix C.

Response to comment 12-41

The shoulder width for the project was established after careful consideration of the following three elements: 1) providing support to the roadway structural section, 2) minimizing environmental impacts, and 3) accommodating bicyclist and pedestrians. After careful review, the proposed shoulder width in the Preferred Alternative is 1.2 m (4 ft.) from the project start to the Clay Butte Lookout turnoff, 0.9 m (3 ft.) from the Clay Butte Lookout turnoff to the road closure gate and 0.6 m (2 ft.) from the road closure gate to the state line. These widths were selected because they allow for future maintenance activities with minimal environmental impact, provide adequate support for the section, and reduce impacts as the road traverses the alpine tundra on the upper end of the project. In areas with retaining walls, bridges, or steepened slopes, guardrails would be used to protect errant vehicles. Guardrail locations would be minimized to those that are absolutely necessary. Guardrail offset widths are established based on the design information presented in Appendix C. Studies have shown that reductions in barrier offset increase sideswipe accidents and make drivers move to the center of the road because drivers tend to shy away from barriers. The recommended offset for a design speed of 60 km/h (37mph) is 1.4 m (4.6 ft.) and for a design speed of 50 km/h (31 mph) is 1.1 m (4 ft.). The 0.6 m (2 ft.) wide offset is the minimum width and would be a design exception.

Response to comment 12-42

Table 12 of the FEIS indicates 4.6 km (2.9 miles) of road, or about 15 percent of the project's length, would be realigned in the Preferred Alternative. About 60 percent of the total project realignment would be at the Top of the World Store. The Top of the World Store realignments were designed to minimize wetland and riparian impacts and to restore wetland areas presently filled by the existing road. The Top of the World Store realignments also would be more curvilinear than the Existing Alignment Option, enhancing the winding nature of the road and contributing to the intrinsic qualities associated with the road's status as an All-American Road. Because the Top of the World Store realignments also would be more curvilinear, operating speeds would be lower than the Existing Alignment Option. Section 2.1 of the FEIS describes what is considered an Existing Alignment Option. Table 16 of the FEIS provides an impact assessment of all areas (travel lanes, foreslopes, cutslope, etc.); most of this area would be revegetated. Table 17 of the FEIS provides permanent impacts of paved travel lanes, shoulders, and offsets.

realignment at any of these segments except to account for additional width of the driving lanes. The existing alignment option is diagrammed as significantly deviating from the existing roadway at Frozen Lake, Bar Drift, East Summit and Albright Curve. It is difficult at the document map scale to determine departure from the existing alignment. Please describe what does, or does not constitute "existing alignment" in terms of departure from the existing center line. We note that at Table 5, the existing alignment options of Alternative 3 will result in the abandonment of 9 acres of road segments and new disturbance of 173 acres. Please document the amount of disturbance arising from foreslope and clear zone features as well as driving lane, shoulder and offset design elements. The relationship of Table 16 to Table 17 needs clarification.

12-43 Appendix Table D-1 costs and environmental effects shows costs and disturbance area. The calculations are based upon a 32' roadway. Please show costs and environmental effects of a 28' roadway so that all build alternatives are analyzed in an equal fashion.

12-44 Table D-1 displays alignment surface area disturbance to wetland, vegetation and old growth forest habitats. The Figures 2 & 3 plus 5 through 7 are useful, but do not provide information to support the table. Figures 13 and 14 only provide a cross section. Please develop a set of figures from the color aerials (the maps used for wetlands in Appendix F at a scale of 1:4000.) to include a surface area disturbance overlay showing roadway width, plus total constructed road.

12-45 2.1 Pg. 25: Beartooth Ravine: Construction of a bridge across the head of the ravine in the preferred alternative is an unnecessary, expensive and visually intruding design feature that cannot be justified by information presented in the DEIS. An alternative utilizing the existing alignment and a 28' roadway including 2' offset for guard rail and inside ditch limit along the entire length is a design exception that will cause the least environmental and visual damage. A constructed turnout from the east bound lane (at approximately the match line on Figure F-1) will provide for viewing of the Beartooth Falls. A similar turn-out at the west end of the ravine will provide views of the canyon and Clarks Fork country.

12-46 Beartooth Grade: This segment is not mentioned in the text DEIS, yet it contains the only roadside example of erect closed canopy subalpine forest. (There is no montane forest in the segment 4 corridor. Montagne forest represents the transition from foothills to subalpine.) At the higher elevations the subalpine forest has lower crowns, an open canopy and is interspersed by mountain meadows. The Beartooth Grade is a unique area on the corridor. Road construction through this area should be conducted with utmost care to limit the amount of disturbance, and removal of trees. Figure 13 Shows the "Proposed Project Typical Section" in a forested area as being a total of 96' wide, which is 4 times wider than the existed road! This is unnecessary and is unjustified by the DEIS. We reject the need for this excessive width. Please detail the proposed road width through this area on a 1:4000 photo.

12-47 2.1 Pg. 25: Top of the World Store: The reconstruction should follow the existing alignment. There is no factual evidence in the DEIS that existing wetland functions have not stabilized in the past 70 years. Except for the footprint of the existing road, wetland vegetation and function characteristics exist on either side of the highway. Care should be taken to reconstruct with only the necessary elevation alignment and minimum

Response to comment 12-43

Appendix D of the DEIS (now Appendix E of the FEIS) was developed to provide a relative comparison among the options. The relationship between the options would be similar using a 8.4-m (28-ft.) roadway to calculate impacts and costs.

Response to comment 12-44

Large-scale plans are available for review at the FHWA and the SNF. They are not needed in the FEIS to disclose environmental impact or to compare alternatives.

Response to comment 12-45

The Beartooth Ravine is a high accident location. Accidents in this location are caused by the substandard curvature, i.e. the inconsistent alignment. Construction of an alternative using the existing alignment would not address the existing substandard curvature. The preferred alternative would improve the horizontal alignment. The proposed bridge also would provide wildlife crossing and minimize wildlife-vehicle conflicts. A parking area proposed just west of the Ravine would provide opportunities for views of the canyon; a pull-off is proposed across from the Beartooth Falls to provide a viewing opportunity. Required bridge widths are detailed in Appendix C.

Response to comment 12-46

Although the forested portion of the Beartooth Highway below the Top of the World Store technically can be described as lower subalpine, the word "montane," was used in the DEIS and FEIS to describe the character of this portion of the highway, and to differentiate it from the forests above the Top of the World Store area. In some locations, paved ditches would be used to minimize cutslopes and clearing. See response to comment 12-44. A large-scale photo is not needed in the FEIS to disclose environmental impact or to compare alternatives.

Response to comment 12-47

Two years of water level measurements indicates that the road is acting as a dam in some locations. For example, wetlands occur uphill of the road but not downhill of the road west of Little Bear Creek Bridge #1. The Top of the World Store realignments provide the opportunity to restore four different wetlands.

Offsite wetland preservation is proposed under all build alternatives, regardless of the wetland restoration provided by the Top of the World Store realignments. Offsets to the guardrail face would be established based on criteria presented in Appendix C.

Comment

Letter 12 continued

Response

stabilized shoulder width. The guardrail offset should be used as a paved shoulder where applicable (Design drawing viewed at the public meeting showed extensive guard rail placement in this section.) The use of guard rails will allow for a 2:1 foreslope design exception that will minimize wetland disturbance. Additional wetland mitigation should come in the form of acquired wetlands elsewhere and not by using the old road as a wetlands bank account to help justifying new alignment.

12-48

2.1 Pg. 26: Little Bear Lake Fen: We support the Retaining Wall option, but there is no justification for the excessive width of the structure. Figure 4. Depicts a roadway surface of 36 feet on a 40 foot wide structure. This is double the measured (7/11/02) width of the current roadway. Please discuss the need for this excessive width. Display a 26' paved roadway width, and total structure width; include the length of the structure and the eastern approach alignment design.

12-49

2.1 Pg. 26: Frozen Lake: The grade to the Frozen Lake Switchback climbs and curves through another form of sub alpine forest. These spruce and fir trees have been joined by white-bark pine to form a low, mostly open canopy. These tree species, seen at and above the switchback take on the a wind formed, contorted shape with some *Krummholz* features, which is the most limited of all vegetation zones in the highway corridor. This is a scarce visual and habitat resource that is unique to Segment 4. Every effort should be made to spare each of these trees, and the granitic rock outcrops along the road in the vicinity. The "existing alignment option" at this curve should not deviate from the footprint of the roadway. The matter of sight alignment should require a design exception to preserve the environmental qualities of this section of the road.

12-50

2.1 Pg. 27: Bar Drift: The existing alignment should be followed at this point. The necessary hairpin curve design at this and other switchback locations on the highway is a tribute to the engineering and construction skill of the original builders. Beartooth Pass (or the West Summit) is the highest (10,946') highway pass in Wyoming. The proposed "consistent alignment" and radius of the 4 reconstructed switchbacks does not honor the historic significance of this stretch of road or the environment through which it passes. This is the narrowest unglaciated alpine section of the Beartooth corridor, being just a few hundred yards in width, between the precipitous walls of two glacial cirques. A narrowed roadway utilizing the guardrail offset as the outside shoulder, should track the centerline as closely as possible. Revegetation of ground disturbed by the reconstruction will be difficult if not impossible and should be major factor in determining the construction footprint.

12-51

East Summit. The DEIS fails to show the realignment at the East Summit, except diagrammatically in Appendix F-9. This feature is common to all alternatives would require and extensive cut and fill disturbance. We do not support this design element and ask that the widened drive lanes and shoulders remain on the existing footprint so as to minimize new disturbance.

12-52

21. Pg. 27: Albright Curve. The same concerns apply to the Albright Curve Area. This section of roadway is identified as wetlands and thus should not be disturbed beyond the absolute minimum construction requirements for 12 foot driving lanes. Paved shoulder width should be accommodated by the guardrail offsets.

Response to comment 12-48

The FEIS was revised to indicate the Bridge Option at the Little Bear Lake fen is the preferred option. It would be easier to construct than a retaining wall. All bridges would be wide enough to accommodate travel lanes, shoulders guardrail offsets, and a guardrail. Appendix C includes additional discussion on guardrail offset widths.

Response to comment 12-49

The existing alignment option at Frozen Lake would closely match the existing alignment, and would require a design exception. Widening would primarily be into the existing rock cut. The switchback would be improved to provide adequate sight distances. This option would disturb less area and would have less environmental impacts than alternate realignment options.

Response to comment 12-50

The Preferred Alternative would closely follow the existing alignment at the Bar Drift, which includes matching the existing curve radii. This option would support the curvilinear driving experience characterizing Beartooth Highway. A narrowed roadway is unacceptable and does not meet the project purpose and need. During final design, slope-steepening techniques (steepened slopes and/or small retaining walls) would be reviewed to help minimize impact to the adjacent alpine tundra. Any slope-steepening activities must be balanced with the revegetation requirements for the project, because steeper slopes are more difficult to revegetate. Revegetation would be completed as part of the construction project.

Response to comment 12-51

The centerline was shifted at the East Summit to improve sight distance and to accommodate visitor use. The abandoned roadway would be incorporated into a parking area at the East Summit.

Response to comment 12-52

When traveling west, the realignment at Albright Curve would transition the driver into the switchbacks on top of Beartooth Pass. A design exception would be required for the horizontal alignment at the Albright Curves. The design speed for these curves provides a transition into the switchbacks to the west and best balances safety and traffic operations with avoidance and minimization of impacts. During final design, slope-steepening techniques (steepened slopes and/or small retaining walls) would be reviewed to help minimize impact to the adjacent alpine tundra. Any slope-steepening activities must be balanced with the revegetation requirements for the project. Revegetation would be completed as part of the construction project. It is unacceptable for a 0.6 m (2 ft.) paved shoulder to accommodate the guardrail offsets.

Comment

Letter 12 continued

Response

12-53

Greater Yellowstone Coalition Preferred Alternative: Alternative 3 - Wildlife Resource Emphasis. We support this alternative of reconstruction with a roadway width of 28' including two 12' driving lanes. Paved shoulder width would vary with guardrail offset, topographic and sensitive environmental constraints. The existing alignment would be followed with the retaining wall option constructed at the Bear Lake Fen. This alternative comes the closest to meeting the goal of minimizing disturbance to vegetation, retaining scenic and historic continuity of the existing roadway and is the least expensive, and perhaps requires the shortest construction period

2.5 Activities and Facilities Common to all Build Alternatives

12-54

2.5 Pg. 53: Roadway Cross Sections: We object to the excessive width of design and drainage features beyond the basic 12' driving lanes. The disturbance shown in these sections must also be displayed on the 1:4000 maps of the highway alignment to that the full impact of the reconstruction project can be judged. We urge that all road reconstruction features shown as cross sections in Figures 13, 14 and 15 be designed with consideration to the unique environmental resources through which the highway passes. Foreslope and ditch widths are excessive. The narrowing of these features will limit habitat/vegetation disturbance: Please justify in the DEIS the need for the excessive width beyond the driving surfaces.

12-55

2.5 Pg. 53: Road Reconstruction: Clearly, the reconstruction project will benefit from by reuse of the existing asphalt as subbase material, and the existing fill. We realize with the widening of the road that additional material, for subbase and asphalt concrete will be needed. On the one hand you mention "In most locations, the existing fill would remain and additional fill would be brought in from excavated areas". Does this mean from material source areas, or is this balance fill from new cuts. This description doesn't convey the magnitude of the construction project if a materials source area of 28 acres is contemplated. Please display, by alternative, the estimated amount of excavated material that will be needed for the reconstruction.

12-56

We understand that blasting may be necessary in the Beartooth Ravine area, and probably near Frozen Lake, even if you remain true to the existing alignment on that curve. The use of excavated rock as embankment material seems necessary. Please indicate what quarry sites would be considered for this larger dimension material.

12-57

Ditches and drainage facilities serve to control run on and run off, to and from the roadway. The features also extend the area of disturbance, and should be minimized wherever possible. Please show criteria for sizing of these features, such as anticipated precipitation rates and return periods. Culverts should be sized and located so as to minimize the impact of outflows on adjacent habitat.

12-58

In minimizing areas of disturbance, please define the area that constitutes construction limits. Does this include tote roads, machinery/truck turn around areas and other construction features that may not necessarily be incorporated into the constructed roadway? Identify the areas that deviate from the roadway width. Contractor specifications should indicate penalties for deviations from construction limits.

Response to comment 12-53

As the DEIS and FEIS discuss, Alternative 3 does not support the purpose and need for the project.

Response to comment 12-54

The proposed typical sections are needed to fulfill the purpose and need for the project. Appendix C discusses the design elements of the proposed roadway. The detailed maps are not needed to disclose effects or to compare between alternatives.

Response to comment 12-55

The required excavation for the project would be about 153,000 m³ (200,000 cy) of material, and construction of embankment would require about 145,000 m³ (190,000 cy) of material. These quantities are based on a preliminary earthwork analysis and would be refined once final adjustments are made in the final design. The excavated material generated on the project would be used for the embankment operations. Depending on material quality, some material may be used for aggregate base course and paving materials. If excavated materials are determined to be of poor quality, then material from the Ghost Creek and Island Creek Moraine might be used. The amount excavation and embankment material does not vary significantly between alternatives.

Response to comment 12-56

Material sources are discussed under the *Material Sources and Staging Areas* section in Chapter 2 of the FEIS. The FEIS was revised to reflect that Island Lake moraine would only be used as a material source if sufficient volume of suitable materials is not available from rock cuts or Ghost Creek.

Response to comment 12-57

See response to comment 12-23.

Response to comment 12-58

Construction limits would include all seeding and mulching areas and clearing. The limits would vary throughout the project based on the condition of the adjacent land. Significant vegetation would be preserved as possible. These limits also would include anticipated truck turnaround areas and materials sites. The FHWA would consider including specifications that have penalties for contractors for not strictly adhering to staying with the construction limits.

Comment

Letter 12 continued

Response

12-59

2.5 Pg. 56: **Bridge Reconstruction:** We recognize the need for removing the historic bridges. We are pleased to see the original hand-worked stone material will be used as facing for the new structures. We disagree that the replacement structures require approximately twice the width (36') as the existing bridges. The Beartooth Lake outlet bridge should be built to accommodate vehicular traffic. A pedestrian bridge could be constructed on the north side for fishers and hikers. Pedestrian crossing marking and signage could be placed. The two Little Bear Ck. bridges with existing alignments of Alternative 3 could be a continuation of the 28' roadway including offsets for the bridge guard rail. The Long Lake Bridge could have a pedestrian walkway on the north side of the structure, as an extension of the paved shoulder area. Note that Segment 2 bridges are 28' wide. We do not support the construction of the Beartooth Ravine Bridge or the Bridge Option at the Little Bear Fen.

12-60

2.5 Pg. 57: **Road Intersections:** Please include a figure indicating the location of intersections, and a design depiction of intersection construction. Also indicate the intersection location and design for the Ghost Ck. Materials Site.

12-61

2.5 Pg. 57: **Pullouts and Parking Areas:** These features will be an important and necessary component of the reconstruction. Please outline the requirements for the American Disabilities Act for "...all pullouts and parking areas". When the Frozen Lake curves are retained in the near-centerline configuration, a pull-in parking area can not be built. The West Summit Switchback area has the same vista; Frozen Lake would be redundant.

12-62

The pull-in area at Deadman's Curve looks to be a very expensive construction that will require considerable alteration of the ground between the roadway and the edge of the cliff. The same basic view into the heart of the Beartooth Range is seen from the West Summit Parking Area. The expense and disturbance of the nine parking-slot area at Deadman's Curve should disqualify this feature from consideration. What are the costs of the pullout and parking areas features? Will the interpretive features be funded by this project; who will be responsible for their development and maintenance?

12-63
(see next page)

2.5 Pg. 60: **Regvegetation:** There is no question that engineering strategies can serve to design and build transportation roadway. The restoration of alpine lands disturbed by construction/reconstruction is far more problematic. This is a major issue that has been identified (#4) and is of primary interest to GYC. Unvegetated scars along the Beartooth Highway mark construction disturbance from the early 1930s. More recent activity on the alpine section in the Montana segment (from the 1960s) where revegetation was tried, has not proved successful. Revegetation study plots established by the US Forest Service Research Station near the MP 44 in Montana in c. 1980 show little meaningful success other than rows of drilled Carix Sp. Empty cone-tainers strung along the cutbanks to the north in Montana show the futility of those efforts.

12-64
(see next page)

The 1999 revegetation plots at ERO site at the Wyoming Ck. parking area show promise this summer. However, this site is in a favorable location shown by the productive grass/forb vegetation adjacent to the plots. Sustainability of diversity, cover and soil genesis is unproven. This plot is a minute representation of the nearly 200 acres of revegetation effort proposed for this project.

Response to comment 12-59

Required bridge widths and associated criteria are discussed in Appendix C. The design width for structures is 11 m (36 ft.). By comparison, the Lake Creek Bridge on the adjacent reconstructed section of Beartooth Highway is 12 m (40 ft.). Due to their high initial costs, bridges are designed to accommodate traffic for a much longer time period than the roadway. Additionally, bridges and retaining walls are located and designed to help facilitate maintenance of traffic during construction. A pedestrian bridge is planned for the Beartooth Lake Outlet Bridge.

In an October 1998 FHWA report "Beartooth Highway Pavement Preservation and Maintenance Management Plan", the Segment 2 bridges were identified as substandard based on width and the fact they are subject to stream erosion. The FHWA recommended to the Beartooth Highway Steering Committee to replace these bridges.

Response to comment 12-60

Road intersections are discussed under the *Road Intersections* section in Chapter 2. All road intersections would have a paved apron leading to the existing gravel road. The intersection of Forest Road 118 (to Ghost Creek) and U.S. 212 would not require modification to accommodate truck traffic. Plans are available at the FHWA and the SNF.

Response to comment 12-61

All parking areas and pullouts were located and sized in coordination with the SNF. A pullout currently exists at Frozen Lake and provides exceptional views. The pullout at Frozen Lake would be retained in all build alternatives. All parking areas are designed to meet Uniform Federal Accessibility Standards, such as providing ramps, handrails, and handicap and van-accessible parking spaces.

Response to comment 12-62

A pullout currently exists at Dead Man's Curve and provides exceptional views of the Rock Creek drainage not provided anywhere else along the road. The pullout also provides access to early summer snow play areas. This pullout would be retained in all build alternatives. Costs of all parking areas and pullouts are included in the total project cost estimates provided in the FEIS. The FHWA would fund interpretation for mitigation described in the FEIS, such as for cultural resource mitigation. The SNF would be responsible for maintenance of interpretive displays.

Comment

Letter 12 continued

12-65 While your discussion of revegetation paints a rosy picture (excuse the reference), it is clear that wildlands revegetation, especially at high elevations, is an evolving art. Research conducted by the Rocky Mountain Research Station continues in this field, with the following needs identified by the Ecological Restoration of Disturbed Lands Project, Brown, R.W. (ret.) ; Amacher, M.C.; Bartos, D.L.; and Mueggler, W.F. (ret.) - 1999.

12-66 "On severely disturbed lands, research and development leading to an improved understanding of restoration and reclamation techniques required to:
a. Initiate natural succession that leads to reestablishment of self-sustaining natural communities.
b. Initiate soil genesis and nutrient cycling
c. Restore natural surface and subsurface hydrologic pathways.
d. Improve water quality in headwater streams, rivers and other waters."

12-67 Please consider a collaboration with the National Park Service, and F.S. Rocky Mountain Station and Montana State University for the development, execution and monitoring of the Landscape and Revegetation Plan. This plan must be included as an addendum to the FEIS, as it should aid in guidance for selected build-alternative. The FHWA recognizes that minimizing vegetation disturbance is a mitigation measure; Alternative 3 best complies with this mitigation strategy.

12-68 2.5 Pg. 61 Wetland mitigation: This section leaves out an important and required wetlands mitigation opportunity: wetlands avoidance. This is mentioned in Chapter 3 as: "EO 11990 requires adverse affects on wetlands and other waters of the U.S. be avoided where possible in implementing federal action. Avoidance should be listed as a wetland mitigation opportunity. Alternative 3 best complies with this mitigation strategy. We will comment more specifically under Chapter 3.

2.5 Other Ancillary Facilities;

12-69 (see next page) 2.5 Pg. 61 Workcamp: We support the proposal for a workcamp. Development of this ancillary facility will help assure an efficient construction program and should serve to provide a comfortable and economical off- hours respite. Several questions come up: How will the workcamp be managed, will the contract provide for a mess hall, showers, recreation facility and laundry services? Will family space be available. Will the camp be optional or mandatory. Will bus shuttle be provided from the camp to the job site? What are the anticipated shift schedules? Will there be contractor-provided EMS services available.

12-70 (see next page) The Forest Service proposes Fox Creek as the preferred workcamp site. We oppose conversion of this site to a workcamp. The campground was designed for short term transient recreationists, not seasonally permanent workers with a variety of trailers and motor homes. The author of these comments inspected the campground on 7/10 and 7/11 and noted design consists of two loops with short (c. 12 - 18') spurs and no pull-through trailer facilities. The site has forest wetland vegetation (*Picea Engelmannii*/*Equisetum* sp. {horsetail}) and spring water flowing immediately adjacent to the northwestern section of the developed areas. In order to accommodate a work camp the site would have to be completely rehabilitated through reconstruction and expansion in this sensitive area. It appears that this would necessitate considerable clearing and constructed surfacing of roads and spurs. A new water

Response

Response to comment 12-63 through 12-67

The FHWA established revegetation test plots at three locations to assist in revegetation planning—Montana borrow area, the West Summit and Gardner Headwall. These sites provide different climatic and edaphic conditions. A variety of techniques, such as seeding rates and mulch types were tested. As the DEIS and FEIS discuss, the FHWA completed a review of relevant research on alpine revegetation to assist in developing a revegetation plan for the project. The NPS has collaborated with the FHWA in developing the landscaping and revegetation plan. FHWA representatives met with landscape architects and revegetation specialists from Glacier National Park and Yellowstone National Park during development of the revegetation plans. The revegetation test plots were designed with input from Dr. Ray Brown of the Rocky Mountain Research Station, and revegetation plans have been designed based on these tests and on past information gathered by Ray Brown and Jeanne Chambers in revegetation tests on the Beartooth Plateau. FHWA representatives also consulted with the USDA-Forest Service Bridger Plant Materials Center and Meeker Plant Materials Centers during development of the revegetation plans for the Beartooth Highway. The NPS provided FHWA representatives with tours of NPS projects, and provided input on the design of the revegetation test plots. A field review of the revegetation efforts with NPS landscape architects was completed in July 2002. A typical pattern for a forested area is shown in Figure 28 in the FEIS. All build alternatives would have the same revegetation efforts. Proposed revegetation plans are not needed to disclose environmental impacts or to compare alternatives.

The FHWA evaluated numerous areas disturbed by the previous road construction activity. Some of these areas are proposed for reclamation. The FEIS discusses these areas under the *Proposed Mitigation* section of section 3.6, *Vegetation, Timber and Old Growth Forest*. Implementation of the proposed landscaping and revegetation plan would revegetate disturbed cut and fill slopes, except for exposed bedrock, as well as other disturbed areas.

Response to comment 12-68

Avoidance and minimization of wetland impacts was a primary concern in project design. For example, the realignment in the Preferred Alternative at Top of the World Store avoids 0.4 ha (1 ac.) of wetlands in comparison to the Existing Alignment Option. In developing a wetland mitigation strategy, the FHWA followed the 404(b)(1) guidelines of 40 CFR 230 and the Memorandum of Agreement between the COE and the EPA concerning wetland mitigation. As the *Conceptual Wetland Mitigation Plan* discusses, avoidance and minimization were the primary mitigation approach. The FEIS provides additional discussion on avoidance and minimization techniques.

Comment

Letter 12 continued

Response

system (with treatment?) would be developed along with sewage facilities to serve the self contained camp units. Electricity would be provided from the 115 Kv. Line adjacent to the area. This site is prime mosquito habitat, and pressure for insecticide control is certain.

12-71

The Forest Service sees this as an opportunity for highway project funding to be utilized for long term Recreational Vehicle facility development. Occupancy of this nature on the banks of the Wild and Scenic Clarks Fork River is questionable. **We oppose the development of a facility tailored specifically to the self-contained units of forest visitors. The Forest Service has traditionally and properly left this RV camping development to the private sector. Such a private facility on the uplands, already exists in the Crandell Area.**

12-72

The alternative to locate a work camp at the junction of U.S. 212 and WY 296 is also seriously flawed. Westbound recreationists descending the Beartooth Highway toward this junction are presented with an incredible sweep of landscape of the Upper Clarks Fork of the Yellowstone River valley, North Absaroka Wilderness Area and Pilot and Index Peaks. The SNF Visual Quality Objective is Retention. The proposed workcamp site is the undisturbed foreground to this landscape view and would be a harsh intrusion on this experience. Once this undeveloped site is compromised for a workcamp with developed utilities, the proposed new maintenance facility and visitor center won't be far behind. This commitment to development would establish an industrial plant with buildings, sand pile, machinery, crew quarters (26 people?!) and night lighting in a visual retention area. The Forest Service also discussed, at the meetings, their desire to move the Crandell Ranger Station (Work Center) and the Sunlight Fire Crew Facility to the junction site, once the project is terminated and the work camp removed. While all this manipulation of a highway reconstruction project may make sense to Forest Service administrative planners, there seems to be little regard of the other values of this area.

12-73

This junction location is in a prime grizzly bear corridor movement area (personal communication with John Winsor, Hancock Ranch) and an elk migration route in the fall and spring. The conversion of this site to industrial development will adversely impact the limited private property adjacent to forest land with visual intrusion, noise, dust, lighting and general commotion, where none exists or is needed. This proposal does not comply with SNF Forest Plan prescription or planning. **GYC rejects these proposals for a workcamp and maintenance facility site anywhere in the vicinity of US 212 and WY 296 junction.**

12-74

The Pilot Creek pit is the most logical and least damaging location for the project work camp. Water and sewage treatment development is feasible, The site begs for some efficient and adaptive use of an otherwise unreclaimed scab on the landscape. In the winter, the site is used as a snowmobile staging area. The Pilot Creek site is already disturbed and in a less sensitive location away from the highway (personal observation 7/9/02). A transformer and metered electric power drop is already in place. The site is suitable for a modular sewage treatment plant, and is close to off-hours recreation amenities of fishing and hiking. There is less inherent wildfire initiation potential at Pilot Creek. Water would be readily available as shown by monitoring wells. It is also less prone to mosquitoes and will not require insecticide spraying. Pilot Creek. is also one mile closer to the work site, which will result in travel cost/time savings.

12-75

The statement (on pg. 72) that "...the SNF *does not want* new or expanded facilities..." does not excuse this (Pilot Creek.) site from analysis in this DEIS. The letter contained in Appendix C from SNF Supervisor Aus to Project Engineer McCauley erroneously states that

Response to comment 12-69

The workcamp would be identified in the contract documents. The contractor would be prohibited from camping on National Forest lands. Workcamp amenities would be determined during final design. These are being developed in conjunction with the SNF and the USFWS. No determination has been made if bus shuttle services would be required. Based on a preliminary analysis of the construction of the project, the contractor would be working a 6-day workweek, and a 10-hour workday to complete the project. There may be limited night-time work, such as rock drilling, cleanup of blasting operations and hauling.

Response to comment 12-70

The Fox Creek Campground is the preferred location for the workcamp. The FEIS provides additional discussion on the need for the workcamp and why the Fox Creek Campground is the preferred location. The FHWA completed a wetland delineation of the Fox Creek Campground and no jurisdictional wetlands were identified. The spruce/horsetail community found at the Fox Creek Campground is not a wetland. See response to comments 2-8 through 2-13 and 2-21 through 2-23.

Response to comment 12-71

The DEIS and FEIS discuss that a portion of the Clarks Fork Yellowstone River about 10 km (6 mi.) south of the project area is a designated Wild River. The segment adjacent to the Fox Creek Campground is not a designated Wild and Scenic River. See response to comments 2-21 through 2-23.

Response to comment 12-72 and 12-73

Section 2.6 *Options Considered But Eliminated* includes discussion on why a workcamp at the junction of U.S. 212 and WY 296 was eliminated from detailed analysis as a workcamp location.

Response to comment 12-74 and 12-75

The FEIS provides additional discussion on the need for the workcamp and why the Fox Creek Campground is the preferred location. Section 2.6 *Options Considered But Eliminated* includes additional discussion on why Pilot Creek was eliminated from detailed analysis as a workcamp location. See response to comments 2-21 through 2-23.

"Other locations (than Fox Creek) would require new development of raw land, do not have a proven water source, or would not be near commercial power." This statement shows that a site visit and analysis has not been made; otherwise Supervisor Aus would have recognized that the Pilot Creek pit is not "raw land" (if that means undisturbed), has a water source indicated by monitoring wells and has a power drop at the site. **GYC feels Pilot Creek would make an ideal workcamp location and would provide the development and amenities that would contribute to efficient project execution and pleasant workforce accommodation.**

12-76

2.5 Pg. 63: Material Source and Staging Areas: The Ghost Creek materials site is the logical source for the project needs. Care should be taken so as not to develop a lasting visual impact visible from the Highway, or the Crandell vicinity. **A more detailed description of this site and proposed activities is necessary. Will a site and operating plan be developed for the permitting necessary to extract the materials and produce the asphalt concrete? Also show the access road and intersection with Hy. 212. What is the storm water drainage plan? What would be the air pollution controls for the batch plant? What would be the protection from fuel spills and oil spills? Would this site be the primary staging area for equipment and project administration? Would there be security and on-site trailer hook-ups? Additional equipment staging areas may be necessary. Please depict the location and footprint of each temporary or permanent staging area operation plan for the protection of the environment from spills and storm water drainage pollution.**

2.6 Options Considered But Eliminated;

12-77

2.6 Pg. 68: Roadway Widths: We support the reconstruction project with driving lanes widened to 12 feet. This increases driving lane width by 3 feet in each lane from the existing roadway. **We ask that the guard rail and bridge railing offsets be incorporated in the paved shoulder design where applicable. By so doing, the shoulder functions will be preserved and the roadway footprint will be minimized with greater consideration given to environmental protection.**

12-78

There is one ad hoc pull out and parking area not mentioned in the text of the DEIS, except in context as a material source in this section. This pullout, which is often used, is a spur road that departs north from the highway at KP 62.1, west of the Gardner Headwall parking area and continues to an earlier borrow pit that is within the study area. **This area should be closed to vehicular use, and the road reclaimed. It seems from observation (7/11/02) that this borrow area will best recover without any additional disturbance necessary for revegetation efforts.**

Chapter 3. Affected Environment, Environmental Consequences, and Mitigation.

12-79

3.1 Pg. 75: Short-term and Long-term effects: Examples of short and long term impacts are described. Clearly many short term impacts of construction activities would cease upon completion of the project. It is likely there will be some activity after the project is completed. **Please indicate what remedial maintenance and rehabilitation would be contemplated soon after the project terminates. Activities may include chip and seal of the road surface, re-striping of lanes and completion of interpretive facilities at some**

Response to comment 12-76

The Ghost Creek materials site would be used for several activities including material processing for aggregate base course and asphalt pavement, and as a staging area where the contractor may elect to store materials to be used for construction. These could include but are not limited to traffic control devices, pipe culvert materials, retaining wall and bridge materials, and support equipment. In addition, the contractor may elect to have the project trailer and laboratory located here to support his management and testing operations. All work at material sites and staging areas would comply with federal, state, and local regulations regarding air and water pollution controls. All proposed staging areas would be located within the identified construction limits. The contractor would be required to follow all erosion control measures identified in the plans and specifications and to have a spill prevention plan. The contractor may elect to have security located at the site.

Response to comment 12-77

Appendix C includes additional discussion of the guardrail and bridge railing offsets. In areas where guardrail is installed, the side slopes are typically steepened to help reduce the environmental impact. See additional information in responses to comments 12-15 and 12-41.

Response to comment 12-78

The FHWA evaluated numerous areas disturbed by the previous road construction activity, including the old materials source near the Gardner Headwall. Some of these areas are proposed for reclamation. The FEIS discusses these areas under the *Proposed Mitigation* section of section 3.6, *Vegetation, Timber and Old Growth Forest*.

Response to comment 12-79

Remedial maintenance activities may include re-striping of travel ways and delineator replacements. Routine maintenance activities would include removal of rockfall debris, upkeep of pulloff and parking areas, and plowing snow off the roadway. Rehabilitation activities could include overlays or chip seals depending upon an evaluation of the pavement conditions. The maintaining agency would complete inspections of the roadway to determine if any rehabilitation measures are required.

Comment

Letter 12 continued

Response

pull-outs. Please explain how short term and long term effect monitoring will be accomplished.

12-80

3.3 Pg. 77: Wetlands and Other Waters of the US: GYC agrees that under Resource Commitments (pg. 86) that "All build alternatives would result in an irreversible commitment of resources" The avoidance of this irreversible commitment would be the No Action Alternative. However, we support a build alternative and thus our comments will be directed toward mitigation. It is stated that on-site wetland mitigation is possible at 10 sites. We dispute that wetland mitigation (of disturbed wetlands) through restoration and creation is possible in this environment at this latitude at these elevations. We have suggested how to minimize disturbance by confining construction width beyond two 12' driving lanes. Special attention must also be given to wet land areas at the (above) Frozen Lake Switchbacks and the solifluction terraced wetlands east of the Gardiner Headway. Neither of these areas have been textually discussed in the DEIS, yet will present formidable mitigation challenges when disturbed.

12-81

This project presents a unique opportunity to determine the impact of disturbance on alpine environment. Disturbed areas should be carefully monitored, and revegetation strategies be conducted in a dynamic fashions so as to be able to respond to failure or unanticipated impacts. A systematic monitoring project should be initiated as the project revegetation work is being conducted and continued through the short term impact bench mark. I would suggest a partnership with an academic institution such as Montana State University, the National Park Service and the Rocky Mountain Research Station to accomplish this monitoring and possible remedial adjustment to reclamation failure.

12-82

We have no faith in the success of on-site wetland restoration or creation. Please display references that define and document successful subalpine wetland restoration or creation projects in the Montana/Wyoming subalpine habitat systems that constitute mitigation for land disturbances due to construction activities. In the absence of such documentation or demonstration of success dispute that wetlands can either be restored or created in the sub-alpine or alpine ecosystem of Segment 4.

12-83

Since a significant wetland mitigation "credit" is proposed from the abandoned roadway with the realignment options (the assumption being the roadway foot print will be restored as wetland) the uncertainty of that mitigation strategy supports the "existing alignment" alternatives. The narrowest of these alternatives, Alternative 3 should be selected. Wetlands not filled, but disturbed by construction activities would be "restored" to the best possible original condition, but would not count as credit against such disturbance. We support the proposed off-site wetland preservation and restoration option through purchase and recognize the high value of the selected site near Silver Gate, Montana as discussed at the public meetings. We feel that the matter of wetland availability in the Greater Yellowstone Area should be revisited. This is a road of national significance and wetland purchasing can not be constrained by artificial state boundaries.

12-84

3.3 Pg. 90: Only Practicable Alternative Finding: The only argument for the agency preferred alternative for realignment, under this section is predicated upon the success of wetlands restoration from tearing up the existing roadbed. There is no conclusive documentation that wetland restoration would be successful. This project is not the place for experimentation. The proposed realignment would cause visual and habitat impacts to the upland meadows, sub-alpine forest (with a white-bark pine component) and

Response to comment 12-80

See response to comment 12-68. The proposed alignments near Frozen Lake and near the solifluction wetlands east of Gardner Headwall would closely follow the existing alignment. Impacts to wetlands at these two areas have been avoided and minimized to the extent practicable.

Nearly all of the proposed onsite wetland mitigation would occur in the Little Bear Creek valley near Top of the World Store. Because of the more favorable climatic and moisture conditions at Top of the World Store area, the likelihood of successful wetland restoration and revegetation of other abandoned road segments is high. No on-site wetland mitigation is proposed above the elevation of Frozen Lake.

Response to comment 12-81

The DEIS and FEIS discuss post-construction revegetation monitoring. All revegetation and wetland mitigation monitoring would be conducted according to commonly accepted scientific methods. See response to comment 12-67.

Response to comment 12-82

See response to comment 12-80.

Response to comment 12-83

As part of the Preferred Alternative, Option A in the Top of the World Store area would minimize wetland impacts, and offer the most opportunity for high-quality restoration of wetlands affected by the existing road. The proposed mitigation plan for all build alternatives would include offsite mitigation on a stream that flows into YNP. See response to comment 12-80.

Response to comment 12-84

See response to comments 12-15, 12-41, 12-68, 12-80, and 12-83.

Comment

Letter 12 continued

Response

other wetland and riparian areas. The DEIS states (Pg. 91) that "For all build alternatives, potential effects would be minimized by using the existing roadbed and roadway corridor where possible, and by implementing feasible mitigation measures." We agree. We also see the logic in a narrower shoulder configuration (utilizing guardrail offsets and 2:1 foreslope) that results in a narrower footprint with less fill requirements for the vertical alignment. **These and other arguments convince GYC that Alternative #3 with our suggested design modifications should be determined as the Only Practicable Alternative to comply with the requirements of EO 11990, Protection of Wetlands.**

12-85

3.4 Pg. 92: Cultural Resources and Traditional Cultural Properties; Affected Environment. We recognize the road and its features as a significant historic resource in context with the recreation development of the Greater Yellowstone Ecosystem. **The engineering achievement of the times is enduring and can be best preserved by the selection of Alternative 3. Table 12 Clearly shows this alternative has the least deviation from the original highway footprint. (Alt. 3 at 5,597' - Alt 6. at 15,048').** The loss of the historic bridges and culvert facing is unfortunate but necessary. Reuse of the facing materials is supported. Interpretive sites in the switchback locations appear to be expensive in design and execution. The Bar Drift site will expand the disturbance footprint at this point of the narrow unglaciated alpine terrain. It would seem that a master visitor interpretation site at the west summit could adequately serve most of the interpretive needs for the highway.

12-86

3.5 Pg. 101: Wildlife: All the alternatives have impacts on wildlife through habitat destruction, corridor fragmentation and increased interaction with humans. **Alternative 3 is shown to create the least disturbance.** The need for clear zones is not demonstrated. Clear zones reduce habitat, provide a crossing barrier from lack of cover security, and in this project will result in removal a critical habitat species, the whitebark pine. A wider road will be driving at faster speeds. Wildlife mortality is shown to increase with increased speed. (Gunther, et al) **Please discuss the need for constructed "clear zone" design elements in terms of speed and wildlife crossing needs.**

12-87

3.6 Pg 126 Vegetation: We have previously discussed our concerns with vegetation disturbance and the difficulty for meaningful reclamation. The section on vegetation is a satisfactory and informative discussion, though we maintain that the entire forested area in Segment 4 should be classified as subalpine, except possibly at the very west end of the project. The species composition of predominately spruce-fir with scattered lodge pole pine speaks to this classification with Douglas-fir and Ponderosa Pine absent in the project area. The subalpine forests change in form and composition (lodge pole pine is replaced by white-bark pine) as elevation is gained. The Krummholz zone is unique as viewed from this high elevation highway and a tree by tree decision should be made when considering construction activities in the area. **Please provide a table of disturbed areas that will be revegetated through this project. Show this revegetation by type and estimate the cost of this reclamation. Include monitoring as a cost factor. Alternative 3 with the narrowest of footprint and original alignment should be preferred for the affected vegetation environment.**

12-88

3.6 Pg. 137: Proposed Mitigation: This general frame work seems comprehensive; the question is, will it work. The vegetation and landscaping plan should be design specific for each soil and vegetation type and incorporated into the final EIS. **The elements calling for**

Response to comment 12-85

All build alternatives would adversely affect the footprint and location of the road. The DEIS and FEIS discuss that the build alternatives, however, would closely following the existing alignment in 80 percent or more of the route. The overall character of the road would be preserved by retaining the switchbacks that convey the engineering accomplishments and preserving the overall characteristics of setting, feeling, association, and location. The DEIS and FEIS discuss that existing stone masonry or similar materials would be used on three culvert headwalls and the bridge abutments (except for the Beartooth Ravine bridge). Interpretive sites have been developed in collaboration with the Wyoming State Historic Preservation Office, the SNF, and interested Native American tribes. Interpretive areas would primarily be located at previously disturbed areas and abandoned road segments.

Response to comment 12-86

A 3-m (10-ft.) clear zone from the edge of the travel lane is the minimum needed in areas without guardrail. In nearly all cases, the shoulder and foreslope would provide the entire clear zone. Figure 2 in the FEIS has been revised to show the clear zone. The design speeds selected for the project are low (60 km/h and 50 km/h [37 mph and 31 mph]), and are lower than the current operating speeds. The DEIS and FEIS discuss that operating speeds may increase in some locations. Improved sight distance and appropriate wildlife crossing signage would minimize impacts on wildlife.

Response to comment 12-87

Technically, all of the forests on the project site are classified as subalpine. The term "montane" was used to describe the character of the forests below the elevation of the Top of the World Store area. All unpaved disturbed areas except rock outcrop would be topsoiled and reseeded. The DEIS and FEIS discuss the impacts of the build alternatives by vegetation community. The cost estimates provided in the DEIS for each alternative include the cost of implementing and monitoring the landscaping and revegetation plan.

Response to comment 12-88

The DEIS and FEIS discuss that separate plans were being developed for seven vegetation communities.

Comment

Letter 12 continued

Response

minimizing vegetation disturbance and other mitigation opportunities also support the selection of Alternative 3.

12-89

3.7 Pg 139: Land Use: Present land use does not seem an issue for the reconstruction project. The sheep allotment at the east end of the project area is an unsuitable use of alpine meadow lands should be closed. Alternative 3 will eliminate the need for new alignment outside the EO 5949 500' withdrawal area. The Top of the World Store is an important special use of public lands that provides needed services and interpretive interaction with the traveling public. The SNF should consider stationing a Forest Service interpretive aid at this location during busy travel periods to enhance public experience with the area. The SUP ski area is an unnecessary intrusion on the alpine landscape for both visual and environmental impact reasons, and should be removed.

12-90

3.8 Pg 144: Visual Resources: The discussion in this section is also, for the most part, satisfactory and informative (except for our quibble over montane forest terminology). However, it is a stretch to try to justify the removal of the Island Lake lateral moraine for road material as improving the view, but this reviewer appreciated the laugh. More seriously, the claim that the sinuosity of the deviating alignment options at the TOW meadows would increase the scenic quality is questionable. The view will change a few degrees with each bend in the road, but a driver speeding through sweeping curves on a 32 foot wide highway (Alternative 6) will not notice this nuance, in proportion to the environmental impacts of the realignment construction. A driver will also see the elevated road bed of the new construction while traveling through the curves. Much of the road corridor west of the West Summit is visible from Clay Butte. There will be noticeable visual impacts from cuts and fills and widening from this view point. Alternative 3 will have less disturbance, and thus will have less overall visual intrusion. During past construction periods, the Pilot Creek batch plant contributed to particulate and visible pollution that hung in the valley especially with inversion conditions. Will the Ghost Creek site produce similar visual intrusions?

12-91

3.9 Pg.151: Recreation Resources: We again emphasize that use of the Fox Creek Campground for the workcamp is inappropriate. Dispersed recreation, especially camping with motorhomes and trailers may be expected to increase after the reconstruction. Additional agency staff commitment will be necessary to monitor and eventually manage this use.

12-92

3.9 Pg. 154: Off-Road Vehicles: This use will only increase, especially as the widened paved roadway tempts larger trailers hauling these vehicles into the highway corridor. SNF staff monitoring dispersed recreation use will be necessary to monitor and manage ORV use. Incursions into adjacent wilderness areas will occur. SNF Trail 10, which originates on the Custer NF is not open to ORVs.

12-93

3.9 Pg. 155: Effects of the Build Alternatives: We feel that the provision for pull outs and fisher access at the western end of the project adequately meets the safety concerns used to justify the wider road width in the preferred "Blended Alternative". Snowmobiling on the roadway is illegal and should not be used to justify wider shoulders.

Response to comment 12-89

The SNF's special use permits are outside the scope of the EIS.

Response to comment 12-90

The DEIS did not justify the removal of the Island Lake moraine because the view would improve. The DEIS indicated that an effect of removing the Island Lake moraine would be an improvement in the view from the road. The DEIS and FEIS discuss that at staging areas, such as Ghost Creek, hot mix plants would be used to make asphalt and would generate hydrocarbon emissions. The plume would be visible from the road and other locations near the staging areas.

Response to comment 12-91

See responses to comments 12-70, 12-74 and 12-75. Monitoring and management of the Fox Creek Campground after its use as a workcamp would be the responsibility of the SNF. The SNF would use and manage the campground in accordance with applicable guidelines for such facilities in grizzly bear habitat.

Response to comment 12-92

An increase in off-road vehicle use is not anticipated to occur with any of the build alternatives. The SNF will continue to monitor and manage off-road vehicle use. The FEIS indicates that Trail 10 is closed to motorized vehicles.

Response to comment 12-93

The Preferred Alternative in the FEIS was modified to reduce the shoulder width to 0.9 m (3 ft.) from the Clay Butte Lookout turnoff to the road closure gate. The FEIS indicates that although a shoulder 1.2-m (4-ft.) or wider is preferred to accommodate anticipated uses, the SEE team recommended a 0.9-m (3-ft.) shoulder to minimize impact. A 0.9 m (3-ft.) shoulder adequately provides for the anticipated uses. Alternatives that would have shoulders narrower than 0.9 m (3 ft.) in the western section are not practicable alternatives. See Appendix C for design reasons for the proposed shoulder width.

Comment

Letter 12 continued

Response

12-94

3.9 Pg. 157 Cumulative Effects: The construction activities on Segment 1 may commit an additional campground for workers on that project. **This effect needs to be displayed.** The combination of construction projects will inhibit recreation traffic. Westbound traffic to YNP may increase from Cody to the East Entrance. Some additional impacts, and benefits (economic) may occur in that corridor. This effect can not be estimated until the project is well underway. The Segment 1 project will commence in Spring 2003 and conclude in the fall of 2007. The Segment 4 project may start in Spring 2004 and continue until 2011. **There should be a discussion on whether the combine construction of two segments over a 4 year period followed by an additional three years work on segment 4 is more impacting than to stretch the construction periods consecutively.** This comment also speaks to the economic concerns.

This concludes our review of the DEIS. A summary follows.

Thank you for the opportunity to comment on this important project.



Don Bachman

- Cc: USDA Shoshone National Forest (Brent Larson, Gary Reynolds)
USDA Custer National Forest (Rand Herzberg)
USDI Fish and Wildlife Service (Michael Long)
USDI Yellowstone National Park (Frank Walker, Nancy Ward)
DOA Corp of Engineers (Chandler Peter)
State of Wyoming Game and Fish Department (Bill Wichers)
Wyoming State Historic Preservation Office (Judy Wolf)
USEPA Region VIII (Dana Adams)

Response to comment 12-94

Use of a campground for the reconstruction of Segment 1 is not proposed and would be prohibited. The FEIS indicates Segment 1 reconstruction may continue to 2007 and that Segment 4 reconstruction would start in either 2004 or 2005 and would continue for 6 years, until 2009 or 2010. The two projects may have up to 4 years of overlap. The FHWA would develop a plan to minimize delays associated with the construction of both projects.

Comment

Letter 12 continued

**BEARTOOTH HIGHWAY RECONSTRUCTION (SEGMENT 4) DEIS
COMMENT SUMMARY**

Greater Yellowstone Coalition -7/23/02

12-95 Summary: The Greater Yellowstone Coalition is committed to a Beartooth Highway reconstruction project that:

- 1. Provides for the continued enjoyment and safety of the driving public;
- 2. Causes the least vegetation, soil and visual disturbance;
- 3. Does not deviate from the existing alignment;
- 4. Does not impact the area of the Hy 212 and WY 296 Junction.

12-96 GYC rejects the FWHA preferred alternative #6.

GYC firmly believes the following factors must be considered in this most sensitive of sub-alpine and alpine environments:

- 12-97** 1. Reclamation and revegetation of disturbed soils and plant habitats from project disturbance is problematic.
- 12-98** 2. Successful restoration of sub-alpine and alpine wetlands has not been documented and can not be used as a mitigation strategy.
- 12-99** 3. The design template for reconstruction of the Beartooth Highway must be to minimize new disturbance at all possible opportunity.
- 12-100** 4. These design opportunities require minimum stabilized shoulder width beyond the 12 foot driving lanes proposed in all build alternatives, and close adherence to the existing road footprint.

12-101 GYC has carefully weighed the matter of reconstruction of the Beartooth Highway in terms of continued safety and enjoyment of the traveling public and concludes that of many of the public interest objectives can be met through Alternative #3. We feel that a 24' driving surface with maximum paved shoulders of 2' where necessary to preserve the roadway from deterioration is a reasonable alternative to the FHWA preference. In order to minimize disturbance we believe a 2' guardrail offset must be defined as the paved shoulder where installed, and the foreslope and cleared area absolutely minimized. Where guardrails are installed, retaining walls and/or 2:1 foreslopes should be the design exception.

12-102 The selection of Alternative 3 with width and alignment modifications to minimize environmental disturbance will result in a safe, enjoyable, and more easily maintained modern highway in context with the remarkable area of the Beartooth Plateau.

db 7/24/02

Response

Response to comment 12-95 and 12-96

Alternative 6 (the Preferred Alternative) has been identified as the preferred alternative because it fully meets all three needs for the project, and best balances safety, maintenance, land management, and traffic operation needs with avoidance and minimization of environmental impacts.

Response to comment 12-97

The FHWA recognized that revegetation of disturbed alpine areas is a significant concern associated with the project. The DEIS and FEIS discuss that FHWA has conducted extensive revegetation test plots in three different areas to examine a wide range of revegetation issues, such as seeding rates, fertilizer types and amounts, organic amendments, and erosion control materials, such as netted fabrics or wood bark mulches. See response to comments 12-63 through 12-67.

Response to comment 12-98

See response to comments 12-68 and 12-80.

Response to comment 12-99

See response to comment 12-95 and 12-96.

Response to comment 12-100

See response to comments 12-15, 12-41, and 12-93.

Response to comment 12-101

See response to comments 12-15, 12-41, and 12-93.

Response to comment 12-102

Alternative 3 does not meet the purpose and need for the project.

Comment

Letter 13

Response



Wyoming Chapter
247 Coffeen Avenue
Sheridan, WY 82801
(307) 672-0425 office
(307) 674-6187 fax

Richard J. Cushing
Ms. Jennifer Corwin
Federal Highway Administration
Central Federal Lands Highway Division
Attn: Environment (WY 23)
555 Zang Street, Room 259
Lakewood, CO 80228

rick.cushing@fhwa.dot.gov
jcorwin@road.cflhd.gov

July 23, 2002

13-1

Please accept these comments regarding improvements to the Beartooth Highway on behalf of the Wyoming Chapter of the Sierra Club. The Wyoming Chapter has over 1,000 members who are collectively asking, how much improvement to this road is needed? The highway has a good safety record; with only 19 accidents in the past decade. Though the road's drainage may need to be improved, these modifications do not require wider travel lanes and paved shoulders. Please consider the least expensive and least intensive changes to the road in your plan to modernize the Beartooth Highway and endeavor to preserve its unique qualities and history.

13-2

Americans don't need another straight road that is like all the other highways in the U.S. People drive on Beartooth Highway because they want to see the scenery, not simply get from one place to another as quickly as possible. Please leave the roadway in its current bed without extensive widening of the paved area. Sierra Club believes that necessary repairs can be made while leaving the historic highway in its original form - built as an entry into Yellowstone National Park. We also ask the Federal Highway Administration to minimize impacts to wetlands and alpine tundra. Wetlands are extremely important wildlife habitat and highway building has a negative effect on these fragile areas. Alpine tundra takes decades to repair itself due to the very short growing season. Important wildlife areas near the highway must be taken into consideration as well. The bighorn

Response to comment 13-1

Improving the road's drainage is only one component of the need to accommodate current and future vehicle volumes and types. Wider travel lanes and shoulders also are required to meet this need. Alternative 6 (the Preferred Alternative) has been identified as the preferred alternative because it fully meets all three needs for the project, and best balances safety, maintenance, land management, and traffic operation needs with avoidance and minimization of environmental impacts, including scenic quality. The overall character of the road would be preserved in the Preferred Alternative by retaining the switchbacks that convey the engineering accomplishments and preserving the overall characteristics of setting, feeling, association, and location.

Response to comment 13-2

All build alternatives would maintain the curvilinear nature of the road with low design speeds (50 km/h and 60 km/h [31 and 37 mph]). The DEIS and FEIS discuss that rehabilitation of the existing road did not meet the purpose and need for the project. Impacts to wetlands and alpine vegetation have been minimized and would continue to be minimized during final design. The DEIS and FEIS discuss that FHWA has conducted extensive revegetation test plots in three different areas to examine a wide range of revegetation issues associated with alpine areas.

The FEIS includes additional discussion of impact mitigation at wildlife crossing areas. The DEIS and FEIS discuss the effects on bighorn sheep. Because of the extensive available habitat surrounding the project area, none of the build alternatives are expected to adversely affect the bighorn sheep herd's health.

Comment

Letter 13 continued

Response

13-3

sheep are very sensitive to human disturbance and a long, intensive highway reconstruction project will jeopardize the bighorn herd's health.

Please keep in mind that the Beartooth Highway is a special piece of American history that may not require as much reconstruction as has been proposed. Thank you for the opportunity to comment.

Sincerely,

Jill Morrow
Conservation Chair
The Wyoming Chapter of the Sierra Club
P. O. Box 430
Jeffrey City, WY 82310
307-544-9009
jmorrow@trib.com

Response to comment 13-3

See response to comment 13-1.

Table A-1. Issues by Commentor: Individuals

Commentor and Issues			
Abel, Betty (Cincinnati, OH)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
Able, Kenneth and Mary (Albany, NY)			
2200	Concerns about the proposed roadway width	3200	Concerns about changes to roadway character and historic qualities
2720	Support Segment 4 rehabilitation only	3901	Concerns about speed
Akers, Kimberly (Springfield, OH)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
Alles, Rosemary (Kamuela, HI)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
Andelin, Clark (Fox River Grove, IL)			
2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		
Andrews, Terry (Denver, CO)			
2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		
Aroni, Ruth (Woodland Hills, CA)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
Ashman, William & Carol (Powell, OH)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
Atkinson, Luan (Charlo, MT)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
Baer, Rich (Great Neck, NY)			
2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Bagatta, Joanna (Mahopac, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Baker, Julianne (Caledonia, MI)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Ball, Anna (Santa Paula, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Bangart-Smith, Laurie (Billings, MT)

3605 Concerns that the Lake Creek Bridge will be removed

Barbee, Joann (Johannesburg, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Barker, Bridget (Missoula, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Bavousett, Rex (Austin, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Bean, Jo Anne (Clearfield, UT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Bennett, Leeann (Lawrence, KS)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Bergeron, Carolyn (Vienna, ME)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3	3502	Concerns about changes to area visual resources, including scenic vistas

Blackburn, Sandra (La Puente, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Blain, Richard (Temecula, CA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Blair, Robert (Ventura, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Blevins, Bruce (Powell, WY)

1101	Believes narrower travel lanes than proposed would accommodate all needs associated with projected traffic	2441	Comment against Alternative 4
		2451	Comment against Alternative 5
1201	Wyoming/NPS should be able to maintain a narrower road	2601	Consider 20- to 24-foot roadway
1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	3200	Concerns about changes to roadway character and historic qualities
2010	Concerns about the cost of reconstruction	3601	Concerns about number, type, size, and location of turnouts/pullouts
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3901	Concerns about speed
2321	Supports option A at Top of the World Store		
2420	Comment in support of Alternative 2		

Blitz, Cati (Nashville, TN)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Blumer, Kristen (Issaquah, WA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Boddie, Nathan (LaGrange, GA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Boido, M (Calgary)

1001 Believes the existing road meets the purpose and need 2430 Comment in support of Alternative 3

Booth, Erik (Ironwood, MI)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 3401 Concerns about impacts to alpine vegetation

Boscole, Jeff (Bellevue, WA)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 3401 Concerns about impacts to alpine vegetation

Bostaph, D (Erie, PA)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 3401 Concerns about impacts to alpine vegetation

Bressler, Suzanne (Billings, MT)

2720 Support Segment 4 rehabilitation only 3502 Concerns about changes to area visual resources, including
3200 Concerns about changes to roadway character and historic scenic vistas
qualities

Brewer, Jeannine (New Port Richey, FL)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 3401 Concerns about impacts to alpine vegetation

Brewer, Rick (New Port Richey, FL)

2300 Concerns about changes to the existing road alignment 3100 Concerns about changes to area wetland resources
2301 Believes realignment at any location is not necessary 3200 Concerns about changes to roadway character and historic
2310 Supports existing alignment at Beartooth Ravine; 3401 Concerns about impacts to alpine vegetation
realignment is unnecessary
2430 Comment in support of Alternative 3

Brockway, Donald (Athens, GA)

2720 Support Segment 4 rehabilitation only

Brown, Albert (Bridger, MT)

2203 Supports 32-ft road 2460 Comment in support of Alternative 6

Brown, David (Charlotte, NC)

2300 Concerns about changes to the existing road alignment 3100 Concerns about changes to area wetland resources
2301 Believes realignment at any location is not necessary 3200 Concerns about changes to roadway character and historic
2310 Supports existing alignment at Beartooth Ravine; 3401 Concerns about impacts to alpine vegetation
realignment is unnecessary
2430 Comment in support of Alternative 3

Brunetti, David (Harrisville, RI)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2301 Believes realignment at any location is not necessary 3401 Concerns about impacts to alpine vegetation
2310 Supports existing alignment at Beartooth Ravine; 3502 Concerns about changes to area visual resources, including
realignment is unnecessary scenic vistas
2430 Comment in support of Alternative 3

Commentor and Issues

Bunch, Jr., William (Tazewell, VA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Burkhart, David (Salem, OR)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Burlingame, Candace (Glendale, RI)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Burro, Douglas (Placencia, CA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Cali, John (Reston, VA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Casey, Mary (Chicago, IL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Cassidy, Virginia (Harleysville, PA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Castagne, Max (Powell, WY)

2003	Requests more information on design guidelines	3613	Concerns about accommodation of HELIP flight helicopters at TOWS parking area
2511	Add or maintain guardrails	3902	Concerns about increases in size of vehicles using the road following reconstruction

Commentor and Issues

Chan, Lynn (Livingston, MT)

1002	Does not agree with purpose and need presented in DEIS	2008	Concerns about the design vehicle used
1003	Requests additional information regarding why existing road does not meet purpose and need	2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary
1203	Concerns about road jurisdiction and funding	2320	Concerns about Top of the World Store realignment
1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	2430	Comment in support of Alternative 3
1521	Concerns about predicted rate of traffic growth	2461	Comment against Alternative 6
1600	Concerns about the SEE Team and cooperating agencies involvement	3104	Concerns about success of wetland creation and restoration

Channell, Gerald (Red Lodge, MT)

2010	Concerns about the cost of reconstruction	2320	Concerns about Top of the World Store realignment
2100	Concerns about the design speed of the road	2430	Comment in support of Alternative 3
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3901	Concerns about speed

Chapman, Karen (Nottingham, MD)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Chedwick, Mike (Decatur, GA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Chitwood, William (Rocky Face, GA)

3502	Concerns about changes to area visual resources, including scenic vistas	3901	Concerns about speed
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Clark, Dennis (Yellowstone National Park, WY)

2720 Support Segment 4 rehabilitation only

Clark, Eleanor (Yellowstone National Park, WY)

1203	Concerns about road jurisdiction and funding	3100	Concerns about changes to area wetland resources
2002	Concerns about design guidelines used for the road	3200	Concerns about changes to roadway character and historic qualities
2008	Concerns about the design vehicle used	3201	Support reuse of stone on new bridges as mitigation
2010	Concerns about the cost of reconstruction	3302	Concerns about increased wildlife mortality from increase traffic speed
2101	Concerns about extent of curve widening due to design speed	3306	Concerns about netted erosion control fabric
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3403	Concerns about the success of revegetation efforts and monitoring
2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	3502	Concerns about changes to area visual resources, including scenic vistas
2601	Consider 20- to 24-foot roadway	3700	Concerns about socioeconomic impacts to communities near the road
2606	Consider new alignment at Top of the World Store	3903	Concerns about changes to accident rates following reconstruction

Clark, Jan (Lenexa, KS)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Cole, Calvin (Uniontown, OH)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Cone, Frances (Marietta, GA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Courtis, David (Bellingham, WA)

2206	Supports roadway width proposed in DEIS, preferred alternative	2622	Use Pilot Creek for workcamp
2312	Supports bridge at Beartooth Ravine	3402	Concerns about impacts to subalpine meadows at Top of the World Store
2320	Concerns about Top of the World Store realignment	3403	Concerns about the success of revegetation efforts and monitoring
2332	Supports retaining wall option at Little Bear Lake Fen	3405	Concerns about weed control
2340	Supports existing alignment option at Frozen Lake	3501	Concerns about changes to visual resources at Top of the World Store
2350	Supports existing alignment option at Bar Drift	3601	Concerns about number, type, size, and location of turnouts/pullouts
2360	Supports realignment at Albright Curve	3602	Concerns about number, type, size, and location of passing lanes
2522	Supports bridge reconstruction	3604	Concerns about number, type, size, and location of signage
2573	Do not use Fox Creek for workcamp site	3608	Concerns about area trails
2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	3703	Suggestions for socioeconomic mitigation
2591	Opposed to using Island Lake materials source		

Courtis, Mary

2573	Do not use Fox Creek for workcamp site	2622	Use Pilot Creek for workcamp
2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility		

Courtis, Neil (Missoula, MT)

2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	2624	Use Painter Store for workcamp
2577	Support workcamp at Fox Creek		

Courtis, William S. (Marcus, WA)

2573	Do not use Fox Creek for workcamp site	2622	Use Pilot Creek for workcamp
2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	2624	Use Painter Store for workcamp

Cowan, David (Bozeman, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Croft, Jo-Ann (Boyd, MT)

2460	Comment in support of Alternative 6		
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Cuthbertson, Tim (Vernonia, OR)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Dalton, Gerald (Naperville, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Dantes, Myrna (Sherman Oaks, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Davey, Ann and Bill (Molt, MT)

3302	Concerns about increased wildlife mortality from increase traffic speed	3901	Concerns about speed
3502	Concerns about changes to area visual resources, including scenic vistas		

Davidson, David (Joliet, MT)

2203	Supports 32-ft road	3905	Concerns about continued road deterioration
2460	Comment in support of Alternative 6		

Davis, Russ (La Jolla, CA)

2720	Support Segment 4 rehabilitation only	3200	Concerns about changes to roadway character and historic qualities
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De Mots, Dennis (Oakdale, CT)

2720	Support Segment 4 rehabilitation only	3200	Concerns about changes to roadway character and historic qualities
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Delaney, James (Alexandria, MN)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Dempsey, Marilyn (Jupiter, FL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Denison, Mr. and Mrs. James (Long Beach, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Derham, Chris (Bozeman, MT)

2622 Use Pilot Creek for workcamp

Dinger, Marilyn (Kaysville, UT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Dipert, Brian (Sacramento, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Doi, Judy (San Bruno, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Dolese, Thomas and Jennifer (Cooke City, MT)

1522	Concerns about validity of accident rate analysis	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3300	Concerns about changes to the area's wildlife resources
2622	Use Pilot Creek for workcamp		

Dsaam, Dsaam

2720 Support Segment 4 rehabilitation only

Duncan, Michael (Buena Park, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

D'Urso, Edmund (Piermont, NY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Edwards, Richard W. (Toledo, OH)

2008	Concerns about the design vehicle used	2441	Comment against Alternative 4
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3601	Concerns about number, type, size, and location of turnouts/pullouts
2320	Concerns about Top of the World Store realignment	3901	Concerns about speed
2421	Comment against Alternative 2		

Eisentrager, Kimberly (Missoula, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Erickson, Elaine (Los Altos, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Evans, Willaim (Asheville, NC)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Faich, Ron (Albuquerque, NM)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Field, Theodore (Osterville, MA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Fischer, John (Pacific Grove, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Fisher, Meg (Charleston, SC)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Flamont, Ernest (Livonia, MI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Fletcher, Judith (Bronx, NY)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation

Fosidck, Deborah (Dallas, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Foster, Dorothy (Topeka, KS)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Fowler, Beverly (Sun Prairie, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Frye, Ralph & Susan

2720	Support Segment 4 rehabilitation only	3901	Concerns about speed
3200	Concerns about changes to roadway character and historic qualities		

Commentor and Issues

Fuchs, Robert (Omaha, NE)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Ganz, Isabel (West Palm Beach, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Gehman, Steven (Bozeman, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

George, Christy (Williamstown, KY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

German, Dennis (Goshen, CT)

2430 Comment in support of Alternative 3

Gibson, Lee (Dallas, TX)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Gillette, Russ (Red Lodge, MT)

2460	Comment in support of Alternative 6	3300	Concerns about changes to the area's wildlife resources
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Commentor and Issues

Glidden, Sue & Ralph (Mtg.) (Cooke City, MT)

1002	Does not agree with purpose and need presented in DEIS	2573	Do not use Fox Creek for workcamp site
1002	Does not agree with purpose and need presented in DEIS	2573	Do not use Fox Creek for workcamp site
1203	Concerns about road jurisdiction and funding	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
1203	Concerns about road jurisdiction and funding	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	2623	Use Colter Pass area for workcamp
1521	Concerns about predicted rate of traffic growth	2623	Use Colter Pass area for workcamp
1521	Concerns about predicted rate of traffic growth	2720	Support Segment 4 rehabilitation only
2300	Concerns about changes to the existing road alignment	2720	Support Segment 4 rehabilitation only
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3301	Concerns about changes to migration linkages and connectivity
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3301	Concerns about changes to migration linkages and connectivity
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3700	Concerns about socioeconomic impacts to communities near the road
2320	Concerns about Top of the World Store realignment	3700	Concerns about socioeconomic impacts to communities near the road
2320	Concerns about Top of the World Store realignment	3704	Concerns about cumulative socioeconomic impacts to communities near the road
2430	Comment in support of Alternative 3	3704	Concerns about cumulative socioeconomic impacts to communities near the road
2430	Comment in support of Alternative 3	3901	Concerns about speed
2461	Comment against Alternative 6	3901	Concerns about speed
2461	Comment against Alternative 6		

Commentor and Issues

Glidden, Sue & Ralph: Cooke City Store (Cooke City, MT)

1002	Does not agree with purpose and need presented in DEIS	2573	Do not use Fox Creek for workcamp site
1002	Does not agree with purpose and need presented in DEIS	2573	Do not use Fox Creek for workcamp site
1203	Concerns about road jurisdiction and funding	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
1203	Concerns about road jurisdiction and funding	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	2623	Use Colter Pass area for workcamp
1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	2623	Use Colter Pass area for workcamp
1521	Concerns about predicted rate of traffic growth	2720	Support Segment 4 rehabilitation only
1521	Concerns about predicted rate of traffic growth	2720	Support Segment 4 rehabilitation only
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3301	Concerns about changes to migration linkages and connectivity
2301	Believes realignment at any location is not necessary	3301	Concerns about changes to migration linkages and connectivity
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3700	Concerns about socioeconomic impacts to communities near the road
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3700	Concerns about socioeconomic impacts to communities near the road
2320	Concerns about Top of the World Store realignment	3704	Concerns about cumulative socioeconomic impacts to communities near the road
2320	Concerns about Top of the World Store realignment	3704	Concerns about cumulative socioeconomic impacts to communities near the road
2430	Comment in support of Alternative 3	3901	Concerns about speed
2430	Comment in support of Alternative 3	3901	Concerns about speed
2461	Comment against Alternative 6		
2461	Comment against Alternative 6		

Goes, Jim (Cottage Grove, OR)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Golding, Jenny (Yellowstone N.P., WY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Goldsmith, Ken (Boston, MA)

2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	2624	Use Painter Store for workcamp
2621	Use Ghost Creek for workcamp		

Goldstein, Walter (Mtg.) (Bozeman, MT)

2573	Do not use Fox Creek for workcamp site	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
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Gorsetman, Mark (Whitestone, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Grant, Connie (Kendrick, ID)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Gross, Vivian (Kirkland, WA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Grotegut, Bette (plattsburg, MO)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Grover, Ravi (Chicago, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Haire, David (Mtg.) (Powell, WY)

2573	Do not use Fox Creek for workcamp site	3606	Concerns about changes to camping and access
2622	Use Pilot Creek for workcamp	5001	Segment 1 should offer year-round access to YNP because the highway was constructed as an access road to YNP. It is inconvenient to drive through Livingston and Gardner to access the Lamar Valley.

Hart, Heather (Bozeman, MT)

1001	Believes the existing road meets the purpose and need	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
2010	Concerns about the cost of reconstruction	3200	Concerns about changes to roadway character and historic qualities
2410	Comment in support of Alternative 1		

Hart, Rob

2410	Comment in support of Alternative 1	2621	Use Ghost Creek for workcamp
2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	2622	Use Pilot Creek for workcamp
2591	Opposed to using Island Lake materials source	3502	Concerns about changes to area visual resources, including scenic vistas
2592	Supports use of Ghost Creek as a materials source		

Hartshorn, William (Hays, KS)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Hawkins, Kathleen (Atascadero, CA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Hayes, Amy (Maryville, TN)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Hayes, Lisa (Peoria, IL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Hedrick, J. Larry (Kearney, NB)

1203	Concerns about road jurisdiction and funding	2440	Comment in support of Alternative 4
1304	Concerns about narrow shoulders would not accommodate bicyclists	3301	Concerns about changes to migration linkages and connectivity
2204	Requests road width wider than proposed (36')	3603	Concerns about visitor safety from a too narrow roadway
2420	Comment in support of Alternative 2		

Heinbaugh, Monika (Billings, MT)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation

Heinold, Chrisian (Oakland, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Hellot, Nathalie

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Henry, William (Tecumseh, OK)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Herner, Betty (Strongsville, OH)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2201	Concerns about the shoulder width	3100	Concerns about changes to area wetland resources
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3401	Concerns about impacts to alpine vegetation
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary		

Heywood, Michael (Highlands Ranch, CO)

2720	Support Segment 4 rehabilitation only	3200	Concerns about changes to roadway character and historic qualities
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Commentor and Issues

Higgins, Alex: Stokes Lawrence (Seattle, WA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Hodges, Lucinda (Missoula, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Hoffman, Stanley (York, PA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Hogg, Kenny

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Holder, Robert (Mount Sinai, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Holmes, Reva (Racine, WI)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Howe, Duane (Homer, AK)

2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
3100	Concerns about changes to area wetland resources	3901	Concerns about speed
3200	Concerns about changes to roadway character and historic qualities		

Hubscher, Alice (Manassas, VA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Hufford, Ken (Mtg.) (Cooke City, MT)

3603	Concerns about visitor safety from a too narrow roadway	3700	Concerns about socioeconomic impacts to communities near the road
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Humowiecki, Jennifer (Riverside, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Ilardi, Robert & Virginia (Bartlett, TN)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Irish, Lura (Lakebay, WA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Jacobs, S. (Craftsbury Common, VT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Jensen, Eldon (Red Lodge, MT)

2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3502	Concerns about changes to area visual resources, including scenic vistas
2521	Request to minimize bridge work	3601	Concerns about number, type, size, and location of turnouts/pullouts

Jessen, Jennifer (Red Lodge, MT)

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Johnston, Calvin (Meriden, KS)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Johnston, Lynette (Meriden, KS)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Johnston, Vicki (Charleston, TN)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Joseph, Sharon (Peoria, IL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Kalinowski, Arlene (Smithton, PA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Karon, Dick & Linda (Jamestown, RI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Keim, Susan (Sun Prairie, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Ken, Aho (Bozeman, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Kepler, John (Fairfax, VA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Kerr, Richard and Dorothy (Red Lodge, MT)

2300	Concerns about changes to the existing road alignment	3905	Concerns about continued road deterioration
3200	Concerns about changes to roadway character and historic qualities		

Keyser, Christine (Berkeley, CA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Khanna, Abhijit (Huntsville, AL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Kingman, David (Long Lake, MN)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Kirschling, Karen (San Francisco, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Kline, Susan (Camarillo, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Kociolek, Angie (Bozeman, MT)

2200 Concerns about the proposed roadway width 3901 Concerns about speed
2430 Comment in support of Alternative 3

Koefler, Arlene (Wilmington, DE)

2460 Comment in support of Alternative 6 5005 Requests notification about segment 1 reconstruction

Kolasky, Ellen (Ann Arbor, MI)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 qualities
3401 Concerns about impacts to alpine vegetation

Kramer, Jennifer (Keene, NH)

1001 Believes the existing road meets the purpose and need 3401 Concerns about impacts to alpine vegetation
2720 Support Segment 4 rehabilitation only 3604 Concerns about number, type, size, and location of signage

Kulakofsky, Carolyn and Michael (San Jose, CA)

3200 Concerns about changes to roadway character and historic 3901 Concerns about speed
qualities

Kurz, Robert (Laguna Niguel, CA)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 qualities
3401 Concerns about impacts to alpine vegetation

LaFollette, Doug (Madison, WI)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 qualities
3401 Concerns about impacts to alpine vegetation

Lammers, Scott (Mount Prospect, IL)

2300 Concerns about changes to the existing road alignment 3100 Concerns about changes to area wetland resources
2301 Believes realignment at any location is not necessary 3200 Concerns about changes to roadway character and historic
2310 Supports existing alignment at Beartooth Ravine; qualities
realignment is unnecessary 3401 Concerns about impacts to alpine vegetation
2430 Comment in support of Alternative 3

Lane, Earl: Society for Species Management and Survival (Hannibal, MO)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 qualities
3401 Concerns about impacts to alpine vegetation

Leblang, Linda (Scottsdale, AZ)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 qualities
3401 Concerns about impacts to alpine vegetation

Lee, Wood (Houston, TX)

2200 Concerns about the proposed roadway width 3100 Concerns about changes to area wetland resources
2201 Concerns about the shoulder width 3200 Concerns about changes to roadway character and historic
2430 Comment in support of Alternative 3 qualities
3401 Concerns about impacts to alpine vegetation

Commentor and Issues

Lehnherr, David (Billings, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Leider, Ethel

2430	Comment in support of Alternative 3	3502	Concerns about changes to area visual resources, including scenic vistas
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Lenaghan, Mike (Boise, ID)

2200	Concerns about the proposed roadway width	2720	Support Segment 4 rehabilitation only
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary		

Lenz, Dennis J. (Massapequa, NY)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation

Lenz, Evelyn (Fort Lauderdale, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Leske, Jeanne (Casper, WY)

1001	Believes the existing road meets the purpose and need	3100	Concerns about changes to area wetland resources
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3300	Concerns about changes to the area's wildlife resources
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Levis, Misty (Houston, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Lewis, Lisa (Missoula, MT)

2430	Comment in support of Alternative 3	3300	Concerns about changes to the area's wildlife resources
3100	Concerns about changes to area wetland resources	3401	Concerns about impacts to alpine vegetation
3200	Concerns about changes to roadway character and historic qualities		

Lien, David (Colorado Springs, CO)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Lindblad, Andy (Northfield, IL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Lischer, Henry (Dallas, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2300	Concerns about changes to the existing road alignment	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Lutenegger, Brian (Madison, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Lutz, Mona (Newport, VA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Macfarlane, Bruce (Larchmont, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Mack, Linda (Red Bank, NJ)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Mahnke, Mary Kathleen (Burlington, VT)

2430	Comment in support of Alternative 3	3200	Concerns about changes to roadway character and historic qualities
2720	Support Segment 4 rehabilitation only		

Mahnke, Sheela (Westminster, CO)

2210	Concerns about total roadway cross-section	3502	Concerns about changes to area visual resources, including scenic vistas
2720	Support Segment 4 rehabilitation only		
3200	Concerns about changes to roadway character and historic qualities	3601	Concerns about number, type, size, and location of turnouts/pullouts

Makela, Lorri (Port Richey, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Malimid, Wendy (Matawan, NJ)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Mathews, Mary (Lake Forest, IL)

2720	Support Segment 4 rehabilitation only	3502	Concerns about changes to area visual resources, including scenic vistas
3200	Concerns about changes to roadway character and historic qualities		

Maxwell, Joseph (Cody, WY)

2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	2350	Supports existing alignment option at Bar Drift
		2362	Supports Option B at Albright Curve
2332	Supports retaining wall option at Little Bear Lake Fen	2622	Use Pilot Creek for workcamp
2341	Supports Option A realignment at Frozen Lake		

Commentor and Issues

McConnell, Karen (Studio City, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

McDonald, Janet (Stone Mountain, GA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

McGuffin, Patrick (Great Falls, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

McKay, Michael (Westminster, MD)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

McManus, Kathy (Sheridan, WY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

McPhie, Sharon (Livingston, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Metz, Nancy (Cape Coral, FL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Michelcic, John (Red Lodge, MT)

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Milam, Bart and Kristi: Top of the World Store (Cody, WY)

2313	Concerns about snowmobile safety at proposed Beartooth Ravine Bridge	2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility
2320	Concerns about Top of the World Store realignment	3403	Concerns about the success of revegetation efforts and monitoring
2525	Concerns about iceflows on bridges	3601	Concerns about number, type, size, and location of turnouts/pullouts
2573	Do not use Fox Creek for workcamp site	3613	Concerns about accommodation of HELP flight helicopters at TOWS parking area

Commentor and Issues

Miller, John (New York, NY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Miller, Neil and Jennifer (Basin, WY)

2601	Consider 20- to 24-foot roadway	3901	Concerns about speed
3200	Concerns about changes to roadway character and historic qualities		

Moore, Matt (Miller Place, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Morgan, H. (Red Lodge, MT)

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Morgan, Mr. & Mrs. Richard (Windermere, FL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Munzke-Deal, Janice (Crow Agency, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Murphy, Alicia (Norris, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Napoli, Phil & Carol (Powell, WY)

1203	Concerns about road jurisdiction and funding	2360	Supports realignment at Albright Curve
1520	Concerns about design speed	3200	Concerns about changes to roadway character and historic qualities
1522	Concerns about validity of accident rate analysis	3601	Concerns about number, type, size, and location of turnouts/pullouts
2300	Concerns about changes to the existing road alignment	3602	Concerns about number, type, size, and location of passing lanes
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3704	Concerns about cumulative socioeconomic impacts to communities near the road
2322	Supports option B at Top of the World Store	3901	Concerns about speed
2340	Supports existing alignment option at Frozen Lake	3903	Concerns about changes to accident rates following reconstruction
2350	Supports existing alignment option at Bar Drift		

Naureckas, Jim (New York, NY)

2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
3100	Concerns about changes to area wetland resources	3702	Concerns about increased use and congestion
3200	Concerns about changes to roadway character and historic qualities		

Commentor and Issues

Nelson, Leif (Westminster, CO)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Newman, Roger (Red Lodge, MT)

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Newton, John (Carbondale, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Nichol, Lois and Jack (Billings, MT)

2301	Believes realignment at any location is not necessary	3502	Concerns about changes to area visual resources, including scenic vistas
2430	Comment in support of Alternative 3	3901	Concerns about speed
3200	Concerns about changes to roadway character and historic qualities		

Nissl, Jan (Boise, ID)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

No Name Given (Thacker, CA)

3200	Concerns about changes to roadway character and historic qualities		
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Norte, Michael (Albuquerque, NM)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Oldemeyer, John and Carole (Silver Gate, MT)

1301	Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder	2591	Opposed to using Island Lake materials source
		2615	Create separate bike path
2202	Supports 28-ft road (12' and 2' or 10' and 4')	3100	Concerns about changes to area wetland resources
2312	Supports bridge at Beartooth Ravine	3102	Support in-lieu-fee wetland preservation
2321	Supports option A at Top of the World Store	3404	Concerns about impacts to whitebark pine
2460	Comment in support of Alternative 6		

O'Neill, Bridget (Jamaica Plain, MA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Palermo, Emilio (Palos Hills, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Parsons, Robert (Bothell, WA)

1001	Believes the existing road meets the purpose and need	2430	Comment in support of Alternative 3
2301	Believes realignment at any location is not necessary		

Commentor and Issues

Patch, Frances (Takoma Park, MD)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Patnode, Angela (Bozeman, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Pearson, Marilyn (Shelton, CT)

2720	Support Segment 4 rehabilitation only	3502	Concerns about changes to area visual resources, including scenic vistas
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Pierce, Brian (Green Bay, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Pope, David (Colorado Springs, CO)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Porter, Leroy (Columbia Falls, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Porter, Wendy (Staunton, IL)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Posten, Kathryn (Rexford, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Preudhomme, Jean-Yves (St. Charles, MO)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Preuss, G. (Bridgeport, CT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Prinkki, John (Red Lodge, MT)

2010	Concerns about the cost of reconstruction	2460	Comment in support of Alternative 6
2203	Supports 32-ft road	3905	Concerns about continued road deterioration

Racey, Wallace (Alta Loma, CA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Radtke, H (Waukesha, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Rakestraw, Kathy (Gainesville, GA)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2201	Concerns about the shoulder width	3100	Concerns about changes to area wetland resources
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3401	Concerns about impacts to alpine vegetation
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary		

Randall, D. (East Setauket, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Rassi, Josh (Bozeman, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Read, Terry (Iron River, MI)

1522	Concerns about validity of accident rate analysis	3200	Concerns about changes to roadway character and historic qualities
3000	Concerns about overall environmental impacts	3609	Concerns about increased use and congestion at area recreation resources

Reeves-Rutledge, C (MEDFORD, OR)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Regula, Joe (Yellowstone National Park, WY)

1002	Does not agree with purpose and need presented in DEIS	2614	Follow existing curves at Albright Curve
1203	Concerns about road jurisdiction and funding	3200	Concerns about changes to roadway character and historic qualities
1303	Questions need to accommodate bicyclists and/or pedestrians	3202	Concerns about evaluation of cultural resources
1521	Concerns about predicted rate of traffic growth	3301	Concerns about changes to migration linkages and connectivity
1522	Concerns about validity of accident rate analysis	3303	Concerns about impacts to the grizzly bear
1600	Concerns about the SEE Team and cooperating agencies involvement	3403	Concerns about the success of revegetation efforts and monitoring
2002	Concerns about design guidelines used for the road	3407	Concerns about the revegetation success criteria
2003	Requests more information on design guidelines	3408	Requests additional information on revegetation
2008	Concerns about the design vehicle used	3409	Concerns about depiction of revegetation success in DEIS
2100	Concerns about the design speed of the road	3502	Concerns about changes to area visual resources, including scenic vistas
2200	Concerns about the proposed roadway width	3601	Concerns about number, type, size, and location of turnouts/pullouts
2201	Concerns about the shoulder width	3901	Concerns about speed
2210	Concerns about total roadway cross-section	3903	Concerns about changes to accident rates following reconstruction
2601	Consider 20- to 24-foot roadway	5004	Clarification of technical details
2608	Follow existing curve at Frozen Lake		

Regula, Penny

2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3200	Concerns about changes to roadway character and historic qualities
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Reichert, Robyn (Lake Worth, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Reid, Natalie (Winchendon, MA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Reisman, E (Dana Point, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Richard, John (Belmont, MA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Richmond, David and Kathy (Clayton, ID)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Ridgway, Bradley (Houston, TX)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Roberson, Keegan (Chula Vista, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Robinson, Elizabeth (Bozeman, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Roney, Bill (Billings , MT)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation

Rouse, Caryn (Mount Vernon, IA)

2200	Concerns about the proposed roadway width	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3	3502	Concerns about changes to area visual resources, including scenic vistas
3100	Concerns about changes to area wetland resources		

Rowe, Tim (Charleston, SC)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Salter, Ruth (Boise, ID)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Saxion, Richard (Sea Girt, NJ)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Saylor, John (South Bend, IN)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Scanlin, Betsy (Mtg.) (Red Lodge, MT)

2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3604	Concerns about number, type, size, and location of signage
2320	Concerns about Top of the World Store realignment	3700	Concerns about socioeconomic impacts to communities near the road
3402	Concerns about impacts to subalpine meadows at Top of the World Store	3703	Suggestions for socioeconomic mitigation
3501	Concerns about changes to visual resources at Top of the World Store	3901	Concerns about speed
3601	Concerns about number, type, size, and location of turnouts/pullouts	3904	Supports traffic mitigation measures such as radio

Schutte, Ron (San Diego, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Scott, Bonnie (Ravensdale, WA)

2200	Concerns about the proposed roadway width	2720	Support Segment 4 rehabilitation only
2301	Believes realignment at any location is not necessary	3502	Concerns about changes to area visual resources, including scenic vistas
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary		

Scotti, O. (Studio City, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Selznick, Stephanie (Quincy, MA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Sharbono, Valerie (Joliet, MT)

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Shedd, Amanda (Sacramento, CA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Short, Duane (Metropolis, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Simpson, Rob

2720	Support Segment 4 rehabilitation only		
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Siverd, John (Alta, WY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Skup, Debra & Paul (Sturgeon Bay, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Smith, Bud (Rhineland, WI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Smith, Jack (Rolla, MO)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Smith, Nancy (Orlando, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Smoley, Jyllian (White Plains, NY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Soler, Ana (El Paso, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Sozio, Gerald (Los Angeles, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Spencer, Ed: B-4 Ranch (Cody, WY)

2574	Do not use Scenic Byway Junction for workcamp site and/or maintenance facility	2624	Use Painter Store for workcamp
2622	Use Pilot Creek for workcamp	2626	Use Bear Creek site for workcamp

Stanzione, Dawn (Barrington, RI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Starr, Curtis (Billings, MT)

2200	Concerns about the proposed roadway width	3200	Concerns about changes to roadway character and historic qualities
2300	Concerns about changes to the existing road alignment		
2320	Concerns about Top of the World Store realignment	3401	Concerns about impacts to alpine vegetation
2720	Support Segment 4 rehabilitation only	3604	Concerns about number, type, size, and location of signage
3100	Concerns about changes to area wetland resources	3901	Concerns about speed
		3903	Concerns about changes to accident rates following reconstruction

Stathis, Jo-Anne (Astoria, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Stauffer and Susan Bury, David (Red Lodge, MT)

1101	Believes narrower travel lanes than proposed would accommodate all needs associated with projected traffic	3000	Concerns about overall environmental impacts
1521	Concerns about predicted rate of traffic growth	3200	Concerns about changes to roadway character and historic qualities
1522	Concerns about validity of accident rate analysis	3302	Concerns about increased wildlife mortality from increase traffic speed
2201	Concerns about the shoulder width	3702	Concerns about increased use and congestion
2202	Supports 28-ft road (12' and 2' or 10' and 4')	3901	Concerns about speed
2322	Supports option B at Top of the World Store	3902	Concerns about increases in size of vehicles using the road following reconstruction
2340	Supports existing alignment option at Frozen Lake	3903	Concerns about changes to accident rates following reconstruction
2350	Supports existing alignment option at Bar Drift		

Stemple, James (Elkins, WV)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Stevens, Judith (Lake Zurich, IL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Stewart, Edward (Brooklyn, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Stoddart, Jane (Naples, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Stokes, Bill (Saint Petersburg, FL)

2430	Comment in support of Alternative 3	3200	Concerns about changes to roadway character and historic qualities
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Commentor and Issues

Stone, James (Aspen, CO)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Sumner, Chuck & Ruth (Cooke City, MT)

2206	Supports roadway width proposed in DEIS, preferred alternative	3200	Concerns about changes to roadway character and historic qualities
2312	Supports bridge at Beartooth Ravine	3201	Support reuse of stone on new bridges as mitigation
2321	Supports option A at Top of the World Store	3302	Concerns about increased wildlife mortality from increase traffic speed
2460	Comment in support of Alternative 6		
2591	Opposed to using Island Lake materials source	3901	Concerns about speed

Sventy, Robert (Edison, NJ)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Swanson-Webb, Jane

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Sweet, Ellen (Lincoln, NE)

2200	Concerns about the proposed roadway width	2430	Comment in support of Alternative 3
2201	Concerns about the shoulder width	3100	Concerns about changes to area wetland resources
2300	Concerns about changes to the existing road alignment	3200	Concerns about changes to roadway character and historic qualities
2301	Believes realignment at any location is not necessary	3401	Concerns about impacts to alpine vegetation
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary		

Switalski, Adam (Missoula, MT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Szyjmanowski, Paul (Curtice, OH)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Taylor, Kenneth (Santa Barbara, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Thomas, Toni (Warrens, WI)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Commentor and Issues

Treinis, Daniel (Burlington, VT)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Troxel, Jeff (Cody, WY)

2008	Concerns about the design vehicle used	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3		
3100	Concerns about changes to area wetland resources	3401	Concerns about impacts to alpine vegetation

Turner, Kathleen (Green Bay, WI)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Valenzuela, Andrea (Benicia, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

van den Noort, Jeff (Bozeman, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Vanderleelie, Roy (Joshua Tree, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Vesperman, Gary (Henderson, NV)

2430	Comment in support of Alternative 3	3200	Concerns about changes to roadway character and historic qualities
3100	Concerns about changes to area wetland resources	3401	Concerns about impacts to alpine vegetation

Vetrano, Tony (Hayward, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Vice, Daniel (Washington, DC)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Vignere, Joel (Lakeside, MT)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Villavicencio, Dennis (Carlsbad, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Vivori, Carol (North Adams, MA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Voll, Susan (Jamaica, NY)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Ward, Philip (Melbourne Beach, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Wasden, John (Powell, WY)

3602	Concerns about number, type, size, and location of passing lanes	3703	Suggestions for socioeconomic mitigation
3701	Concerns about impact of delays on tourism		

Webb, J. (Gainesville, FL)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Wehrman, Richard (Houston, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Weishaar, Steven

2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation
3200	Concerns about changes to roadway character and historic qualities		

Weisser, Rebecca (New York, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Wengeler, Bill (Yellowstone National Park, WY)

2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3502	Concerns about changes to area visual resources, including scenic vistas
2720	Support Segment 4 rehabilitation only	3901	Concerns about speed
3401	Concerns about impacts to alpine vegetation		

Commentor and Issues

Wheaton, Marsha (Traverse City, MI)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

White, Steven (Murfreesboro, TN)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Williams, Kenny (Memphis, TN)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Williams, Paul (Atlantic City, NJ)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Wiltermood, Bob & Susan (Port Orchard, WA)

2720	Support Segment 4 rehabilitation only	3601	Concerns about number, type, size, and location of turnouts/pullouts
3200	Concerns about changes to roadway character and historic qualities		

Winsor, John & Tish: Hancock Ranch (Cody, WY)

2430	Comment in support of Alternative 3	2621	Use Ghost Creek for workcamp
2573	Do not use Fox Creek for workcamp site	3300	Concerns about changes to the area's wildlife resources
2577	Support workcamp at Fox Creek		

Wood, Jim (San Antonio, TX)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Woodry, Laura (Azusa, CA)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Woolman, Marcia and Henry (The Plains, VA)

2460	Comment in support of Alternative 6	2591	Opposed to using Island Lake materials source
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Wyberg, Bryan (Coon Rapids, MN)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Commentor and Issues

Yarrow, H. (Seattle, WA)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Young, Ginger (Spring, TX)

2300	Concerns about changes to the existing road alignment	3100	Concerns about changes to area wetland resources
2301	Believes realignment at any location is not necessary	3200	Concerns about changes to roadway character and historic qualities
2310	Supports existing alignment at Beartooth Ravine; realignment is unnecessary	3401	Concerns about impacts to alpine vegetation
2430	Comment in support of Alternative 3		

Young, Kent (Red Lodge, MT)

2430	Comment in support of Alternative 3	3604	Concerns about number, type, size, and location of signage
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Zadik, Peter (Jamaica, NY)

3200	Concerns about changes to roadway character and historic qualities
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Zard, Bill (Red Lodge, MT)

2203	Supports 32-ft road	2460	Comment in support of Alternative 6
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Zarin, Judith (Dolgeville, NY)

2200	Concerns about the proposed roadway width	3100	Concerns about changes to area wetland resources
2201	Concerns about the shoulder width	3200	Concerns about changes to roadway character and historic qualities
2430	Comment in support of Alternative 3	3401	Concerns about impacts to alpine vegetation

Zubia, Jane C. (Powell, WY)

2622	Use Pilot Creek for workcamp	2625	Against use Painter Store for workcamp
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1000—Purpose and Need—General

Comment 1001: Believes existing road meets purpose and need

Response 1001: The three needs sections of Chapter 1 discuss the deficiencies associated with the existing road. The existing road does not accommodate current or future vehicle types and volumes, is not reasonably maintainable, and does not support the SNF's land management goals. The DEIS was modified to include additional information on the need for the project.

Comment 1002: Does not agree with purpose and need presented in DEIS

Response 1002: The purpose and need was developed by the FHWA in cooperation with the cooperating agencies.

1100—Needs Associated with Accommodating Projected Traffic

Comment 1101: Believes narrower travel lanes than proposed would accommodate all needs associated with projected traffic

Response 1101: Appendix C discusses in detail the selection of the travel lane and shoulder widths. Section 2.6, *Options Considered But Eliminated* of the DEIS and FEIS describe reasons for not selecting narrower travel lanes. The FEIS indicates that although a shoulder 1.2-m (4-ft.) or wider is preferred to accommodate anticipated uses, the SEE team recommended a 0.9-m (3-ft.) shoulder between the Clay Butte Lookout turnoff and the road closure gate to minimize impact. A 0.9 m (3-ft.) shoulder adequately provides for the anticipated uses. Alternatives that would have shoulders narrower than 0.9 m (3 ft.) wide between the Clay Butte Lookout turnoff and the road closure gate would not fulfill the purpose and need.

1200—Needs Associated with Maintenance

Comment 1201: Wyoming/NPS should be able to maintain a narrower road

Response 1201: The proposed roadway width is needed to safely accommodate snowplowing and snow storage, especially during shoulder season snow events (June and September) when the road is open to traffic. The FEIS includes additional discussion on maintenance requirements.

Comment 1203: Concerns about road jurisdiction and funding

Response 1203: The FHWA agrees that the issue associated with jurisdiction is separate from the decision on the reconstruction project. Maintenance and road design, however, are integrally related. As Chapter 1 of the DEIS and FEIS discuss, one of the needs for the project is to provide a roadway that can be reasonably maintained by a maintaining agency. For example, providing travel lanes of insufficient width to accommodate snowplows would result in a roadway that cannot be reasonably maintained. In its current condition, the road cannot be reasonably maintained. The FHWA is required to follow 23 CFR 625.3, which requires state standards be used in design of the proposed project. This regulation also addresses maintenance.

The FHWA does not agree that road design does not play a part in determining who will maintain the road. If the proposed improvements do not meet minimal industry standards or make future maintenance unreasonably expensive, WYDOT may justifiably refuse maintenance responsibility of the road. Maintenance problems are not strictly due to heavy snowfall, mountainous terrain, remoteness, and lack of funding. Other contributing issues include a narrow existing road

with constant pavement edge raveling, insufficient ditches and culverts that allow saturation of the subgrade and deterioration of the road surface, the alignment of the road through wetlands (particularly at the Top of the World), and flooding of the road due to the span and alignment of the existing bridges. Several key design elements improve the ease of maintenance and reduce the cost of maintenance of the highway. These include wider travel lanes and shoulders to better accommodate snow plows, improved graded and paved ditches to convey drainage and provide snow storage, paved shoulders and graded foreslopes to reduce edge raveling and help support the structural section, and realigned bridges to reduce road flooding. Balancing safety, maintenance and environmental impacts resulted in the design measures included in the Preferred Alternative.

1300—Needs Associated with Management

Comment 1301: Questions that SNF management goals require 4-ft shoulder rather than 2-ft shoulder

Response 1301: See response to comment 1101

Comment 1303: Questions need to accommodate bicyclists and/or pedestrians

Response 1303: The SNF, per the SNF Land and Resources Management Plan, manages the road corridor for rural and roaded natural recreation opportunities. The SNF manages Segment 4 for two distinct types of road use. The SNF manages the section west of Long Lake for more intensive recreational activity, including pedestrian and bicycle use. All of the developed recreation sites along the road are found west of Long Lake. The two campgrounds along Segment 4, Beartooth Lake and Island Lake, are popular camping locations and provide access to area lakes. More information regarding management of the lands

adjacent to the highway can be found in the section entitled *Needs Associated with Land Management Goals* in Chapter 1.

Comment 1304: Concerns about narrow shoulders would not accommodate bicycling

Response 1304: Currently, bicyclists must ride in the travel lane because there are no shoulders. Wider travel lanes coupled with shoulders would provide much improved safety for bicyclists. Bicycle use would be better accommodated west of the road closure gate with a 0.9-m (3-ft.) or wider shoulder.

1520—Traffic Volumes, Speeds, and Accidents

Comment 1520: Concerns about design speed

Response 1520: Design speed is a selected speed used to determine the various design features of a roadway. The DEIS and FEIS discuss how the design speed for the project was selected. Most curves would have the same design speed as the existing curves. The largest increase in operating speeds probably would occur in the Top of the World Store area in Alternatives 3 and 4. These alternatives have the alignment option that would follow the existing roadway, where current operating speeds are the highest. Alternatives 5 and 6 would use Option A at the Top of the World Store area, and would have the slowest operating speeds, due to the curvilinear design of the road realignment. Also see *Response 2100* and *Response 3901*.

Comment 1521: Concerns about predicted rate of traffic growth

Response 1521: The DEIS and FEIS describe the basis for the projected 3 percent annual traffic increase. Growth in traffic on area roads, regional

recreational trends, and population growth were examined.

Comment 1522: Concerns about validity of accident rate analysis

Response 1522: As the DEIS and FEIS discuss, the analysis was completed using the crash prediction module of the Interactive Highway Safety Design Model. The FHWA developed the model to predict the safety performance of two-lane rural highways. The model considers numerous design elements of the road, such as design speed, vertical and horizontal alignment, travel lane and shoulder width, and road length.

1600—The SEE Team and Cooperating Agencies

Comment 1600: Concerns about the SEE Team and cooperating agencies involvement

Response 1600: One commenter asked if the NPS was involved with the project. As the current maintaining agency for the road, the NPS has been involved since project inception. NPS staff attended all SEE team meetings and participated in developing the design criteria for the project, reviewing proposed alternatives, and reviewing all environmental reports and the preliminary EISs.

Another commenter questioned if an interdisciplinary approach was used in developing the project. The FHWA used an interdisciplinary approach in developing the project and in assessing impacts. Individuals with backgrounds in natural, physical, and social sciences were involved in preparing the EIS (see in Chapter 6) and also were involved in project scoping development.

2000—Alternatives—General

Comment 2002: Concerns about design guidelines used for the road

Response 2002: The reconstruction would incorporate an improved alignment, grade, and width to guidelines adopted by the FHWA and the Wyoming Department of Transportation (WYDOT), as required by FHWA's regulations (23 CFR 625). These regulations require that federally-funded roads not on the National Highway System, such as the Beartooth Highway (U.S. 212), be designed, constructed, and maintained to the standards of the state in which they are located. Design exceptions to minimize environmental impacts, including exceptions to shoulder width and design speed, are proposed as part of all build alternatives. Refer to Appendix C for further explanation of all design controls and elements of the design.

Comment 2003: Request for more information on design guidelines

Response 2003: Additional information on the design standards for the project is found in Appendix C. Appendix C includes additional discussion on foreslopes, clear zones, guardrail offsets, and paved ditches.

Comment 2008: Concerns about the design vehicle used

Response 2008: Based on the traffic counts conducted on the highway, roughly 3% of the vehicles are greater than 10 m (30 ft.) in length. The single-unit bus was used as the design vehicle on the route because of the number of tour buses and recreational vehicles that use the route on a daily basis. These vehicles cannot negotiate most of the switchbacks without encroaching into the opposing lane. In 2025, an average of 100 buses or large recreational vehicles are predicted to use the route daily. Any vehicle restrictions could substantially affect the tourism of Red Lodge and Cooke City, Montana and was not supported.

Additional information on the design standards for the project is found in Appendix C.

Comment 2010: Concerns about the cost of reconstruction

Response 2010: The estimated cost of all build alternatives is between \$40 and \$50 million. This expenditure is needed to reconstruct a road that meets the purpose and need for the project. The proposed project would include items not typically associated with a road project, such as extensive revegetation, reuse of stone masonry, and limits on construction activities, such as nighttime construction.

2100—Design Speed

Comment 2100: Concerns about the design speed of the road

Response 2100: The design speeds selected for the corridor were based on the selection criteria identified in Appendix C. Based on this analysis, a design speed of 60 km/h (37 mph) was selected for the section of roadway from the west end of the project to the Little Bear Lake and a speed of 50 km/h (31 mph) was selected from Little Bear Lake to the east end of the project. The 50 km/h (31 mph) design speed is below the minimum AASHTO recommended design speed, and would be an exception to the design standards. In addition, several locations along the project have reduced design speeds, which minimize impact. These areas include the Beartooth Ravine and the switchbacks on the east end of the project. All curves were designed to address driver expectancy consistent with the remainder of the highway and minimize abrupt changes in the horizontal alignment. Also see *Response 1520* and *Response 3901*.

Comment 2101: Concerns about extent of curve widening due to design speed

Response 2101: Curve widening is based on design speed, curve radius, width of roadway, and design vehicle. Traffic studies conducted on the highway indicate about 3% of the vehicles are greater than 10 m (30 ft.) in length. In 2025, an average of 100 buses or large recreational vehicles are predicted to use the road daily. These vehicles cannot negotiate most of the switchbacks without unsafely encroaching in the opposing lane. Curve widening would provide additional width on curves to accommodate vehicle-wheel tracking. Curve widening would be applied to all build alternatives. Additional information on the design standards for the project is found in Appendix C.

2200—Roadway Width

Comment 2200: Concerns about the proposed roadway width

Response 2200: The DEIS and FEIS discuss the need for the proposed roadway width. Chapter 1 includes additional information on the need for the proposed roadway width. Also see *Response 1101*.

Comment 2201: Concerns about the shoulder width

Response 2201: The Preferred Alternative has been modified to have a shoulder width of 1.2 m (4 ft.) from the project start to the Clay Butte Lookout access road, a 0.9 m (3 ft.) shoulder to the road closure gate and a 0.6 m (2 ft.) shoulder to the project end. The Preferred Alternative balances environmental impacts with design standards by varying the shoulder width. Narrower shoulder width would not support recreational uses. Section 2.6, *Options Considered But Eliminated* of the

DEIS and FEIS discuss narrower and wider shoulder widths.

Comment 2202: Supports 28-ft road (12' and 2' or 10' and 4')

Response 2202: Travel lanes less than 3.6 m (12 ft.) would not accommodate projected traffic. Shoulders less than 0.9 m (3 ft.) west of the road closure gate would not support existing and anticipated recreational uses.

Comment 2203: Supports 32-ft road

Response 2203: A 9.6-m (32-ft.) roadway was not incorporated into most of the Preferred Alternative because a narrower width would fulfill the purpose and need for the project and would reduce environmental impact. The Preferred Alternative would have short section from the project beginning to the Clay Butte Lookout turnoff that would be 9.6 m (32 ft.) wide.

Comment 2204: Request road width wider than proposed (36')

Response 2204: A 10.8-m (36-ft.) roadway was considered but eliminated in the DEIS and FEIS, and not incorporated into the Preferred Alternative because a narrower width would fulfill the purpose and need for the project and would reduce environmental impact.

Comment 2206: Supports roadway width proposed in DEIS, preferred alternative

Response 2206: Thank you for your comment. Chapter 1 includes additional information on the need for the proposed roadway width.

Comment 2210: Concerns about total roadway cross-section

Response 2210: See *Response 1101*. Appendix C of the FEIS includes additional information about foreslopes and clear zones. The SEE team

recommended a 0.9-m (3-ft.) shoulder between the Clay Butte Lookout turnoff and the road closure gate to minimize impact. A 0.9 m (3-ft.) shoulder adequately provides for the anticipated recreational uses.

2300—Alignment Options

Comment 2300: Concerns about changes to the existing road alignment

Response 2300: All build alternatives would closely follow the existing alignment over 80% of the project length. Changes to the existing roadway alignment are proposed to improve visitor safety and to minimize environmental impacts. The longest realignment length would be in the Top of the World Store area. The Top of the World Store realignments are designed to minimize wetland and riparian impacts and to restore wetland areas presently filled by the existing road. The Top of the World Store realignments also would be more curvilinear and have lower operating speeds more consist with adjoining sections than the Existing Alignment Option.

Comment 2301: Believes realignment at any location is not necessary

Response 2301: Realignment are proposed to improve safety or minimize environmental impact. See response to comment 2300.

2310—Beartooth Ravine Realignment

Comment 2310: Supports existing alignment at Beartooth Ravine; realignment is unnecessary

Response 2310: The Beartooth Ravine is the location along Segment 4 with the highest accident rate. Studies have shown that high accident locations occur when changes in operating speeds are more than 16 km/h (10 mph). Two build alternatives, Alternative 2 and 3, would closely

follow the existing alignment in the Beartooth Ravine. These two alternatives would have changes in operating speeds more than 16 km/h (10 mph) and would continue the current unsafe conditions. The bridge option is a component of the Preferred Alternative because it would have a change in operating speeds less than 16 km/h (10 mph) and would be a safer option. The safety improvement would come from a design speed more consistent with the adjoining segments.

Comment 2312: Supports Bridge at Beartooth Ravine

Response 2312: The primary reason for using a bridge at Beartooth Ravine in the Preferred Alignment is safety. See response to comment 2311.

Comment 2313: Concerns about snowmobile safety at proposed Beartooth Ravine Bridge

Response 2313: The bridge at Beartooth Ravine would safely accommodate snowmobiles. It would be similar in operation to the new Lake Creek bridge on U.S. 212.

2320—Top of the World Store Realignment

Comment 2320: Concerns about Top of the World Store realignment

Response 2320: The Top of the World Store realignments are designed to minimize wetland and riparian impacts and to restore wetland areas presently filled by the existing road. The Top of the World Store realignments also would be more curvilinear and have lower operating speeds more consist with adjoining sections than the Existing Alignment Option.

Comment 2321: Supports Option A at Top of the World Store

Response 2321: See response to comment 2320.

Comment 2322: Supports Option B at Top of the World Store

Response 2322: Option B at Top of the World Store was not included in the Preferred Alternative because it would affect more wetlands than Option A.

2330—Little Bear Lake Fen Options

Comment 2332: Supports retaining wall option at Little Bear Lake Fen

Response 2332: The Bridge Option at the Little Bear Lake fen is the preferred option. It would be easier to construct than the retaining wall option.

2340—Frozen Lake Realignment

Comment 2340: Supports existing alignment option at Frozen Lake

Response 2340: The Existing Alignment Option is the preferred option because the alignment would closely follow the existing road, and would maintain the curvilinear road character. The design speed of the curves would be similar to the existing design speeds. At the Frozen Lake switchback, the new alignment would diverge from the existing alignment at the switchback to increase sight distance.

Comment 2341: Supports Option A realignment at Frozen Lake

Response 2341: Option A realignment at Frozen Lake was not incorporated into the Preferred Alternative because it would disturb more area and wetlands.

2350—Bar Drift Realignment

Comment 2350: Supports existing alignment option at Bar Drift

Response 2350: The Existing Alignment Option is the preferred option because the alignment would closely follow the existing road, and would maintain the curvilinear road character. The design speed of the curves would be similar to the existing design speeds.

2360—Albright Curve Realignment

Comment 2360: Supports realignment at Albright Curve

Response 2360: Option A is the preferred option. Although Option A would be a design exception, it would require less of a speed change than the 30 km/h (19 mph) Existing Alignment Option.

Comment 2362: Supports Option B at Albright Curve

Response 2362: Option B at Albright Curve was not incorporated into the Preferred Alternative because it would disturb more area and wetlands than Option A. Option B also would disturb fens.

2410—No Action

Comment 2410: Comment in support of Alternative 1

Response 2410: The No Action Alternative would not accommodate current or future vehicle types and traffic volumes, would not support SNF's management goals, and would result in a road that is not reasonably maintainable.

2420—Alternative 2

Comment 2420: Comment in support of Alternative 2

Response 2420: Alternative 2 is not the Preferred Alternative because it would disturb more wetlands than Alternative 6.

Comment 2421: Comment against Alternative 2

Response 2421: Comment noted.

2430—Alternative 3

Comment 2430: Comment in support of Alternative 3

Response 2430: Alternative 3 is not the Preferred Alternative because it would not accommodate current and future recreational uses and would not fulfill the purpose and need for the project.

2440—Alternative 4

Comment 2440: Comment in support of Alternative 4

Response 2440: Alternative 4 is not the Preferred Alternative because it would disturb more wetlands than the Preferred Alternative. Alternative 4 also would impact fens.

Comment 2441: Comment against Alternative 4

Response 2441: Comment noted.

2450—Alternative 5

Comment 2451: Comment against Alternative 5

Response 2451: Comment noted.

2460—Alternative 6

Comment 2460: Comment in support of Alternative 6

Response 2460: Of the alternatives that fulfill the purpose and need for the project, Alternative 6 would disturb the least amount of wetlands. Alternative 6 is the least environmentally damaging practicable alternative.

Comment 2461: Comment against Alternative 6

Response 2461: Comment noted.

2510—Roadway Cross Sections

Comment 2511: Add or maintain guardrails

Response 2511: Guardrail would be used in accordance with AASHTO guidelines, typically on 1:3 or steeper fill slopes more than 3.3-m (10-ft.) high. Guardrail would be maintained by the maintaining agency.

2520—Road and Bridge Reconstruction

Comment 2521: Request to minimize bridge work

Response 2521: The four bridges within the proposed project are too narrow for vehicle types that currently use the road, and do not provide adequate load carrying or hydraulic capacity. None of the bridges meet current safety standards and only have a 15 to 20 year remaining lifespan. Bridges would be reconstructed to correct these deficiencies. Section 2.6, *Options Considered But Eliminated* of the DEIS and FEIS describe all the options considered to avoid adversely affecting the bridges. A detailed discussion of bridge width is contained in Appendix C.

Comment 2522: Supports bridge reconstruction

Response 2522: Comment noted. Also see response to comment 2521.

Comment 2525: Concerns about iceflows on Little Bear Creek bridge #1

Response 2525: All new bridges would be 1 to 2 m (3 to 6 ft.) higher and built with longer spans (typically more than twice the existing length) than existing bridges to alleviate the current problems with ice buildup.

2570—Workcamp

Comment 2573: Do not use Fox Creek for workcamp site

Response 2573: Fox Creek is the preferred workcamp location. The FEIS provides additional discussion on the need for the workcamp and why

the Fox Creek Campground is the preferred location. The *Options Considered but Eliminated Section* of the FEIS contains the rationale for eliminating other locations for the workcamp.

Comment 2574: Do not use Scenic Byway Junction for workcamp site and/or maintenance facility

Response 2574: Section 2.6, *Options Considered But Eliminated* of the FEIS includes a discussion of why a workcamp at the junction of U.S. 212 and WY 296 was eliminated from detailed analysis.

Comment 2577: Supports workcamp at Fox Creek

Response 2577: The FEIS includes additional discussion on why the Fox Creek workcamp site is the preferred location.

2590—Materials Sources and Staging Areas

Comment 2591: Opposed to using Island Lake materials source

Response 2591: The FEIS indicates the Island Lake moraine would be used only in the event that material from blasting and from Ghost Creek is not adequate.

Comment 2592: Supports use of Ghost Creek as a materials source

Response 2592: Comment noted.

2600—Suggested Alternatives

Comment 2601: Consider 20- to 24-foot roadway

Response 2601: Section 2.6, *Options Considered But Eliminated* of the FEIS includes additional discussion of these two roadway widths and why they were eliminated from detailed analysis. Also see *Response 1101* and *Response 2202*.

Comment 2606: Consider new alignment at Top of the World Store

Response 2606: Numerous alternative alignments were considered in the Top of the World Store area to move the road out of wetlands and to minimize wetlands impact. Option A would minimize wetland impacts and offer the most opportunity for high-quality restoration of wetlands affected by the existing road. Both Option A and B would result in about 2 ha (5 ac.) of abandoned road segments, and four different wetlands currently bisected by the road would be restored in Options A and B. Because of the more favorable climatic and moisture conditions at Top of the World Store area, the likelihood of successful wetland restoration and revegetation is higher than other abandoned road segments.

2610—Suggested Alignment Options

Comment 2608: Follow existing curve at Frozen Lake

Response 2608: The Existing Alignment Option at Frozen Lake would closely match the existing alignment, but would still require a design exception. Widening would primarily be into the existing rock cut. The switchback would be improved to provide adequate sight distances. This option would disturb less area and would have less environmental impacts than alternate realignment options.

Comment 2614: Follow existing curves at Albright Curve

Response 2614: Option A is the preferred option at Albright Curve. The realignment at Albright Curve would transition the driver into the switchbacks on top of Beartooth Pass. A design exception would still be required for the alignment at the Albright Curve. The design speed for Option A would provide a transition into the switchbacks

to the west and best balances safety and traffic operations with avoidance and minimization of impacts.

Comment 2615: Supports separate bike path

Response 2615: A separate bike path was not considered because of the additional environmental impact. Bicycle use would be accommodated west of the road closure gate with a 0.9-m (3-ft.) or wider shoulder.

2620—Suggested Workcamp Locations

Comment 2621: Use Ghost Creek for workcamp

Response 2621: The FEIS includes additional information on the need for the workcamp. Section 2.6 *Options Considered But Eliminated* includes additional discussion on why Ghost Creek was eliminated from detailed analysis as a workcamp location.

Comment 2622: Use Pilot Creek for workcamp

Response 2622: The FEIS provides additional discussion on the need for the workcamp and why the Fox Creek Campground is the preferred location. Section 2.6 *Options Considered But Eliminated* includes additional discussion on why Pilot Creek was eliminated as a workcamp location.

Comment 2623: Use Colter Pass area for workcamp

Response 2623: The FEIS provides additional discussion on the need for the workcamp and why the Fox Creek Campground is the preferred location. Section 2.6 *Options Considered But Eliminated* includes additional discussion on why Colter Pass was eliminated from detailed analysis as a workcamp location.

Comment 2624: Use Painter Store for workcamp

Response 2624: The FEIS includes additional information on the need for the workcamp. Section 2.6 *Options Considered But Eliminated* includes additional discussion on why private land near the Painter Store was eliminated from detailed analysis as a workcamp location.

Comment 2625: Against Painter Store for workcamp

Response 2625: See response to comment 2624.

Comment 2626: Use Bear Creek site for workcamp

Response 2626: The SNF believes this comment refers to a location near the Beartooth Lake campground. The DEIS and FEIS discuss why the Beartooth Lake campground site was eliminated from detailed analysis as a workcamp location.

2720—Segment 4 rehabilitation

Comment 2720: Supports Segment 4 rehabilitation only

Response 2720: Section 2.6, *Options Considered But Eliminated* of the DEIS and FEIS discuss why Segment 4 rehabilitation only would not meet the purpose and need for the project and was eliminated from detailed analysis.

3000—Chapter 3, Affected

Environment, Environmental Consequences

Comment 3000: Concerns about overall environmental impacts

Response 3000: In the Preferred Alternative, the FHWA reduced environmental impacts by reducing shoulder width from the Clay Butte Lookout turnoff to the road closure gate, and is committed to investigating options for minimizing environmental impacts during final design. In the

Preferred Alternative, the road cannot be narrowed further and still fulfill the purpose and need for the project. Also see the new section regarding *Techniques to Avoid and Minimize Impacts* added to Section 2.5 of the FEIS.

3100—Wetlands

Comment 3100: Concerns about changes to area wetlands

Response 3100: See response to comment 3000. The FHWA would continue to use techniques to avoid and minimize wetland impacts to the extent practicable throughout the design process. Also see the new section regarding *Techniques to Avoid and Minimize Impacts* added to Section 2.5 of the FEIS.

Comment 3102: Support off-site wetland mitigation location

Response 3102: Comment noted. Off-site wetland mitigation would be used in conjunction with on-site restoration and creation to mitigate unavoidable wetland impacts.

Comment 3104: Concerns about success of wetland creation and restoration

Response 3104: The FHWA has thoroughly investigated the wetland creation and restoration sites, including plant species, water levels, and soil composition. The FHWA is confident that hydrologic conditions at all the wetland creation and restoration sites would be adequate to support wetlands. Additional information on the proposed wetland mitigation plan is contained in the *Conceptual Wetland Mitigation Plan*, available at FEIS review locations.

3200—Cultural Resources

Comment 3200: Concerns about changes to roadway character and historic qualities

Response 3200: The FHWA recognizes the importance of the roadway's historic qualities, which is reflected in one of the purpose and need statements. Construction of any build alternative would adversely affect Segment 4 of the road, and four historic bridges. All build alternatives would adversely affect the footprint and location of the road. The FEIS includes the proposed mitigation for these effects. The FEIS discusses that the build alternatives, however, would closely following the existing alignment over 80% of the project length. Stone masonry or similar stone would be used on proposed bridges and some culvert headwalls. The overall character of the road would be preserved by retaining the switchbacks that convey the engineering accomplishments and preserving the overall characteristics of setting, feeling, association, and location.

Comment 3201: Support reuse of stone on new bridges as mitigation

Response 3201: Existing stone masonry would be used to the extent practicable on the new bridges.

Comment 3202: Concerns about evaluation of cultural resources

Response 3202: As the DEIS and FEIS discuss, the project area was surveyed for cultural resources in accordance with WY SHPO requirements, and Segment 4 and four historic bridges were found to be eligible for the NHRP. The Lake Creek bridge also was eligible. Three historic culvert headwalls are features that contribute to the eligibility of Segment 4. The Wyoming State Historic Preservation Officer concurred with these findings. In addition, the DEIS and FEIS state that

implementation of any build alternative would result in an adverse effect on the eligibility of Segment 4 and the four historic bridges. The Wyoming State Historic Preservation Officer also has concurred with these findings (see Appendix D for the SHPO letter). The FHWA, the SNF, the NPS and the Wyoming SHPO have developed a draft Memorandum of Agreement for mitigation of adverse effects to historic resources. The agencies are in the process of finalizing the MOA, which will be included in the ROD. A cultural landscape assessment is not required for an effects analysis.

3300—Wildlife

Comment 3300: Concerns about changes to the area's wildlife resources

Response 3300: The FHWA has worked closely with the SNF and USFWS to avoid and minimize impacts to wildlife. Field reviews during July and August 2002 with these two agencies evaluated ways of avoiding impacts to wildlife and the corridors they use. In addition, narrowing the width of the preferred alternative from 9.6 m (32 ft.) to 9.0 m (30 ft.) from the Clay Butte Lookout turnoff to the road closure gate would reduce the amount of habitat affected.

Comment 3301: Concerns about changes to migration linkages and connectivity

Response 3301: Field reviews during July and August 2002 with the SNF and USFWS assessed ways of avoiding impacts to wildlife crossings. Each crossing was reviewed, and adjustments were made to improve the road design. Where possible, roadway design elements such as guardrail and slopes were manipulated to make crossings safer and easier for wildlife. In addition, revegetation plans for each crossing have been developed for the

purpose of maintaining current migration linkages and connectivity.

Comment 3302: Concerns about increased wildlife mortality from increased traffic speed

Response 3302: As stated in the DEIS and FEIS, the risk for wildlife/vehicle collisions is expected to remain low because the reconstructed road would retain its curvilinear nature, operating speeds would remain low (50 to 75 km/h; 30 to 45 mph), and traffic volumes would remain low (1,972 average vehicles per day projected for 2025). Traffic levels are very low in the early morning and late evening when animals are most likely to cross the highway. Traffic volumes and operating speeds are expected to be below levels that would adversely affect wildlife.

Comment 3303: Concerns about impacts to the grizzly bear

Response 3303: Impacts to grizzly bear habitat and movement would be avoided, minimized, or mitigated for under the preferred alternative. Proposed grizzly bear mitigation measures are detailed in the DEIS and FEIS. The FHWA has worked closely with the USFWS to develop a preferred alternative that minimizes adverse effects on the grizzly bear and other wildlife. The reduction in roadway width of the preferred alternative from 9.6 m (32 ft.) to 9.0 m (30 ft.) from the Clay Butte Lookout turnoff to the road closure gate would reduce direct grizzly bear habitat impacts.

Comment 3306: Concerns about netted erosion control fabric

Response 3306: Netted erosion control fabric would be used only where wind and water erosion hazard is a concern. An erosion control mat with cotton netting is proposed, which decomposes quickly and tears easily.

3400—Vegetation, Timber, and Old Growth

Comment 3401: Concerns about impacts to alpine vegetation

Response 3401: The Preferred Alternative has an 8.4-m (28-ft.) roadway width in the alpine zone to minimize impacts. The FHWA is committed to investigating options for minimizing environmental impacts during final design. These techniques are described in the *Techniques to Avoid and Minimize Impacts* section added to Section 2.5 of the FEIS. As described in the DEIS and FEIS, test plot studies to analyze the success of alpine revegetation techniques are underway at three high alpine sites along segment 4. Areas temporarily disturbed by road reconstruction activities would be revegetated using the most successful revegetation techniques of the test plots. In addition, the FHWA is committed to revegetating some areas disturbed during previous (1930s to 1970s) roadwork activities.

Comment 3402: Concerns about impacts to subalpine meadows at the Top of the World Store

Response 3402: The FHWA and cooperating agencies agree that the opportunity to restore some of the historic wetland system in the Little Bear Creek valley near Top of the World Store balances the adverse impacts to subalpine meadows. Revegetation techniques described in the DEIS and FEIS, such as using locally collected seed and undulating the disturbance line, would help the revegetated areas blend with the existing landscape. Because of the more favorable climatic and moisture conditions at the Top of the World Store area, the likelihood of successful wetland restoration and revegetation of other abandoned road segments is high.

Comment 3403: Concerns about the success of revegetation efforts and monitoring

Response 3403: The FHWA has thoroughly investigated revegetation techniques. Topsoil windrowing, native seed collection, and erosion control measures would be implemented to ensure revegetation success. Monitoring would continue at least 5 years following revegetation, or until standards for the stormwater permit are met. See the section 3.6 *Vegetation, Timber, and Old Growth Forest* in the FEIS for more information.

Comment 3404: Concerns about impacts to whitebark pine

Response 3404: Impacts to whitebark pine forest were minimized during preliminary highway design. Further minimization techniques would be used during final design. These techniques are described in the *Techniques to Avoid and Minimize Impacts* section added to Section 2.5 of the FEIS. In addition, narrowing the width of the preferred alternative from 9.6 m (32 ft.) to 9.0 m (30 ft.) from the Clay Butte Lookout turnoff to the road closure gate would reduce the amount of whitebark pine affected. Whitebark pine is included in the revegetation plans for forested areas.

Comment 3405: Concerns about weed control

Response 3405: As described in the DEIS and FEIS, a weed management plan would be implemented in accordance with the Wyoming Weed and Pest Control Act, and Best Management Practices (BMPs) would be followed to avoid weed invasions and to control invasions should they occur. Additional information on weed control measures is found in the FEIS under *Proposed Mitigation* in section 3.6.

Comment 3407: Concerns about the revegetation success criteria

Response 3407: Revegetation standards for the project would comply with WDEQ standards for a stormwater permit. The standards require that revegetated slopes be finally stabilized and have 70% of the density of the vegetation of the adjacent undisturbed areas. See the section 3.6 *Vegetation, Timber, and Old Growth Forest* of the FEIS for more information.

Comment 3408: Request for additional information about revegetation

Response 3408: Proposed revegetation is described in section 3.6 *Vegetation, Timber, and Old Growth Forest*. Based on the revegetation test plots, the FHWA anticipates that revegetated areas would meet the WDEQ standards within 5 years of completion of revegetation efforts. Some areas, especially exposed locations, may require additional revegetation efforts. Revegetation standards for the project would comply with WDEQ standards for the stormwater permit.

Comment 3409: Concerns about depiction of revegetation success in DEIS

Response 3409: The revegetation success information in the DEIS is based on current success in revegetation test plots and expected success during the project. Although anticipated plant height and cover were used to create the simulations, it was difficult to model the existing and post-reconstruction vegetation. Even though the simulations are based on scientific information, they are still simulations and only provide a visual approximation of conditions following reconstruction.

3500—Land Use, Visual Resources

Comment 3501: Concerns about changes to visual resources at Top of the World Store

Response 3501: Based on a detailed visual assessment, the realignments at the Top of the World Store would have higher scenic quality than the existing alignment. The FHWA believes that the long-term benefits of wetland and riparian restoration at the Top of the World Store outweigh the short-term visual impacts during revegetation.

Comment 3502: Concerns about changes to area visual resources, including scenic vistas

Response 3502: As described in the DEIS and FEIS, all road construction would be in the foreground of the viewer. Scenic vistas would not be affected by the project. Widening the road pavement would enlarge or increase cut faces, fill slopes, retaining walls, drainage structures, and bridges. Cut and fill slopes would be visible until revegetation is successful. Improved pullouts and parking areas would provide safer opportunities for scenic viewing.

3600—Recreation Resources

Comment 3601: Concerns about number, type, size, and location of turnouts/pullouts

Response 3601: As described in the DEIS and FEIS, pullouts would allow a safe mix of recreation uses. Pullouts also would create additional impact areas, so a balance of impacts and benefits is necessary. The FHWA tried to find this balance for the preferred alternative by keeping the most strategic and popular pullouts, and eliminating those that would result in unacceptable environmental impacts (for example, pullouts in wildlife crossing areas).

Comment 3602: Concerns about number, type, size, and location of passing lanes

Response 3602: No passing lanes are proposed for the reconstruction. The FHWA determined that proposed pullouts would provide sufficient room

for slower moving vehicles to pull over and allow others to pass. Passing lanes would cause greater environmental impacts.

Comment 3603: Concerns about visitor safety from a too narrow roadway

Response 3603: The FHWA believes that the Preferred Alternative would greatly improve the safety of the traveling public on the road. Increased lane width and added shoulders, additional drainage features, and improved sight distances would provide a safer roadway.

Comment 3604: Concerns about number, type, size, and location of signage

Response 3604: Because the road is a Scenic Byway, signage would be kept to a minimum. After reconstruction, speed limit signs would be posted as necessary. Appropriate wildlife crossing signage is part of the proposed mitigation.

Comment 3605: Concerns that the Lake Creek bridge will be removed

Response 3605: An interpretive site is planned for the Lake Creek bridge, as mitigation for impacts to historic bridges from the proposed reconstruction. There are no plans to remove the historic or existing bridge. A parking area on the west side of the existing bridge would be improved.

Comment 3606: Concerns about changes to access and camping

Response 3606: There would be no changes to access to trails, roads or Top of the World Store. and no changes to camping in the immediate Segment 4 corridor. The Fox Creek campground would be used as a workcamp during road construction, which would remove it temporarily from public use. Other impacts to recreation access would be minimal and localized.

Comment 3609: Concerns about increased use and congestion at area recreation resources

Response 3609: Over the long term, use of area recreation resources is expected to increase whether or not the reconstruction is completed.

Comment 3613: Concerns about accommodation of HELP flight helicopters at the Top of the World Store parking lot

Response 3613: A pullout across from the Top of the World Store would remain in all build alternatives to ensure a location for an emergency helicopter.

3700—Socioeconomic Resources

Comment 3700: Concerns about socioeconomic impacts to communities near the road.

Response 3700: As stated in the FEIS, the FHWA believes traffic on Segment 4 will continue to increase, regardless of reconstruction.

Comment 3701: Concerns about the impact of delays on tourism

Response 3701: A Public Information Program for construction and delay management is being developed in cooperation with area towns. Delays would be kept to 30 minutes during peak tourism periods.

Comment 3702: Concerns about increased use and congestion

Response 3702: One of the needs addressed by the proposed project is the accommodation of future traffic volumes, as well as current vehicle types. Commercial traffic is prohibited in YNP and thus would not increase on Segment 4.

Comment 3703: Suggestions for socioeconomic mitigation

Response 3703: The FHWA does not provide economic reimbursement for business losses due to construction. Other mitigation measures discussed in the FEIS, however, would be implemented, including a Public Information Program for construction and delay management.

Comment 3704: Concerns about cumulative socioeconomic impacts to communities near the road.

Response 3704: A Public Information Program for construction and delay management on the two Beartooth highway projects, on Segments 1 and 4, is being developed.

3900—Transportation

Comment 3901: Concerns about speed

Response 3901: As discussed in the FEIS, all build alternatives were designed to match existing alignment as much as possible. Consequently, operating speeds should be similar. Operating speeds may increase by about 8 km/h (5 mph) due to increased perception of safety by the driver from the wider roadway and shoulders. There are two major transition areas in Segment 4, where it is especially important for curves to tighten gradually because of driver expectations. At the Beartooth Ravine, traveling both east and west, drivers have come through a section with relatively shallow curves, and do not expect the sharp reduction in speed necessary to negotiate the existing curves. By constructing a bridge, the reduction in operating speeds would be less, reducing the accident risk at this location. The second major transition is the Albright Curve, where drivers traveling west have come through a flat section of gentle curves. The preferred alignment design speed of 40 km/h (25 mph) would be a less dramatic speed reduction than the existing alignment option 30 km/h (19

mph). The preferred option at the Top of the World Store would slow speeds in this area by incorporating a more curvilinear alignment. Also see *Response 1520* and *Response 2100*.

Comment 3902: Concerns about increases in size of vehicles using the road following reconstruction

Response 3902: Currently, large pickup trucks pulling trailers, large recreational vehicles, and tour buses use the road. Use of the highway by large vehicles is likely to continue. Because the Beartooth Highway is designated as an approach road to Yellowstone National Park, the road should accommodate visitors to the park, which typically include large recreational vehicles. Limitation on vehicle size could affect the economies of Red Lodge and Cooke City, Montana.

Comment 3903: Concerns about changes to accident rates following reconstruction

Response 3903: The FHWA completed an accident prediction analysis to compare the expected safety performance of the alternatives. The DEIS and FEIS discuss that accident rates are projected to be lower in the build alternatives than in the future No Action Alternative. This information is presented in Table 33, and in the *Long-term Changes in Operating Speeds and Accident Rates* section of section 3.11 *Transportation* of the FEIS.

Comment 3904: Supports traffic mitigation measures such as radio

Response 3904: The Public Information Program would use a variety of media, including radio, to communicate with area residents and visitors about the construction of Segments 1 and 4.

Comment 3905: Concerns about continued road deterioration

Response 3905: The FHWA completed a pavement preservation project in 2000 that temporarily repaired the roadway surface, and was designed to provide a driveable surface for about 5 to 10 years. The pavement project, however, did not correct the underlying causes of deterioration. Work on the highway reconstruction currently proposed would begin in 2005 and last 6 years until 2010.

5000—Misc. Comments

Comment 5001: Comments regarding Segment 1

Response 5001: Western Federal Lands Highway Division is completing reconstruction of Segment 1. Yellowstone National Park is responsible for maintenance, including snowplowing, of Segment 1. The decision to open Segment 1 to year-round access would be made by the maintaining agency.

Comment 5004: Clarification of technical details

Response 5004: One commenter questioned the impact numbers in Table 6 on page 70 of the DEIS. The commenter expressed concern that the total impacts were 559 or 737 ac., which he/she calculated by adding all of the impact numbers together. To determine total new impacts, the reader should see the third line under “disturbed area”, which represents the total new impact from each roadway width option. The total new impacts for 7.2-m (24-ft.) and 8.4-m (28-ft.) widths would be 54 ha (134 ac.) and 57 ha (142 ac.) respectively. The impact of an 8.4-m (28-ft.) wide road would be about 5% greater than a 7.2-m (24-ft.) wide road.