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Willett Creek, Forest Service Road (FSR) 226 Reroute Project Environmental Assessment

Medicine Wheel Ranger District

Bighorn National Forest

Big Horn County, Wyoming

Township 53 North, Range 88 West, Section 10

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The environmental assessment, decision notice, and finding of no significant impact are available at <http://www.fs.usda.gov/projects/bighorn/landmanagement/projects> and in hard copy, by request, from Christopher D. Jones, 2013 Eastside 2nd St. Sheridan, WY 82801, phone (307) 674-2627.

Introduction

The Bighorn National Forest, Medicine Wheel Ranger District, is responding to a request from the public to reopen and reroute a segment of Willett Creek Road 226 that has been temporarily closed to motorized vehicles in order to prevent continued resource damage at the current water crossing (Special Order BHF 2014-05). Prior to the special order, Willett Creek Road 226 was used by a wide variety of off-highway vehicles including all-terrain vehicles, utility terrain vehicles, jeeps, four-wheel drive passenger vehicles, and single-track motorcycles. The condition of the deep crossing at the creek has led to resource issues within the riparian corridor and safety concerns with vehicles crossing it. Repeated use has developed a deeper water crossing over time where many users now feel uncomfortable driving. As a result, users have pioneered multiple routes across the riparian area in order to locate a more suitable crossing.

This existing 0.10 mile road segment on Willett Creek Road FSR 226 is located in Township 53 North, Range 88 West, Section 10 in Big Horn County, Wyoming (see Figure 1). Forest Service Road 226 is a connector route between two roads (FSR 26 and FSR 277) providing access to the public in these areas. The existing FSR 226 is part of a historic road, the Hyattville Road (a.k.a. Mail Trail; 48BH1570). This road connects to other roads providing loops and access to the backcountry.

Purpose and Need for Action

The existing road crossing of the Willett Creek tributary does not meet the desired balance between ecological values and human use prescribed for the management area as described in Category 3 of the Forest Plan (pg. 2-34).

The 2005 Forest Plan identifies the existing road segment and crossing as located within a 3.31 Backcountry Recreation, Year-Round Motorized Use Management Area where motorized recreation opportunities are included among the desired conditions (2005 forest plan). The forest plan guidelines for this management area include: 1) Conduct resource management activities which are compatible with and which minimize impacts to recreational resources and opportunities, and 2) Manage for an adopted Recreation Opportunity Spectrum class of semi-primitive motorized.

The desired conditions and guidelines are currently not being met because this segment of FSR 226 is temporarily closed to motorized vehicles in order to prevent continued resource damage at the existing water crossing (Special Order BHF 2014-05).

In order to achieve objectives and move toward desired conditions in the 2005 Revised Forest Plan (Forest Plan), the purpose of, and need for, the proposed action are as follows:

- To improve riparian condition
- To reopen road access to off-highway vehicles
- To provide a safer route
- To meet road maintenance standards

Proposal Development

The proposal was listed in the schedule of proposed actions (SOPA) report on February 23, 2015, and the legal notice for the Notice of Proposed Action (NOPA) was printed in the Casper-Star Tribune on February 23, 2015, with the 30-day comment period ending on March 25, 2015. The NOPA was posted to the Forest's web page and mailed to the following individuals, organizations, and agencies:

Wyoming Game & Fish Department Headquarters
 Hooks Ranch, LLC
 Double Doc Ranch
 Greg Flitner
 Peter DeCabooter (Hideout Adventures)
 Jeanette Tolman
 Wyoming State Trails
 East Yellowstone Trout Unlimited Chapter
 Northwest Wyoming Off-Highway Vehicle Alliance
 Bear Lodge Resort
 Big Horn County
 Arapaho Tribal Council
 Northern Cheyenne Tribal Council
 Crow Tribal Council
 Shoshone Tribal Council

Twenty-nine comment letters were received as part of the scoping and specific comments were given full consideration in the development of issues.

Issues

The interdisciplinary team developed the list of issues/concerns by considering the following: 1) internal scoping in which issues are identified through interdisciplinary team input, and 2) external scoping in which issues are identified through consideration of public and agency comments. The issues drove the development of the proposed action and were addressed in the effects analyses. All specific comments received through external scoping during the NOPA comment period were considered in developing the issues and refining the proposed action. The proposed action guided the environmental analysis process. Issues were not carried forward if they were: 1) not specific to the proposed action; 2) already addressed by law, regulation, and/or policy; or 3) beyond the scope of this analysis. The disposition statements in Table 1 demonstrate how the issues were integrated into the proposed action or no action alternatives as well as the design features which allowed the potential for conflict to be minimized.

Table 1. Issues for the Willett Creek, Forest Service Road (FSR) 226 Reroute Project.

Issue Statement	Disposition
Reopening the existing road to motorized recreational vehicle use would continue the desired access.	Under the No Action Alternative, the previous motorized access would be reopened under the conditions that existed prior to the Special Orders to temporarily close FSR 226.

Issue Statement	Disposition
Rerouting FSR 226 and reopening the road to motorized vehicle access would mitigate resource damage and safety concerns on the existing route while providing public enjoyment.	Under the Proposed Action, the reopening and rerouting of FSR 226 would minimize effects to the riparian area and provide continued public access to motorized recreation.
Following section 106 processes to evaluate inventories of cultural resources would mitigate the effects of ground disturbance activities.	The Wyoming State Historic Preservation Office reviewed the inventory and analysis area and concurred that the site would not be adversely affected with regard to historic/cultural resources.

Alternative 1 - No Action

Forest Service Road (FSR 226) is currently under temporary closure to motorized vehicles by special order to eliminate safety concerns and resource damage. The no action alternative would continue existing conditions prior to the temporary closure by opening the closed road segment and providing maintenance to the existing stream crossing at the unnamed tributary to Willett Creek. The crossing would be repaired to maintenance level 2 standards and open only to high clearance vehicles.

Proposed Action

The proposed action would provide or construct the following:

- 1) Reroute and construct a new .14 mile segment of FSR 226 at the unnamed tributary to Willett Creek (downstream of the current crossing at a narrower portion of the stream).
- 2) Close, decommission, and rehabilitate the old water crossing including those portions of the old road (0.1 mile) from where the new segment starts and rejoins the existing road (see map in Figure 1).

Forest Plan Implementation

This project would implement the 2005 *Bighorn National Forest Revised Land and Resource Management Plan* (forest plan) by addressing the following goals, objectives, and strategies:

- Attain or maintain water quality necessary to comply with state of Wyoming water quality standards in all streams on the Forest. Water must be of sufficient quality to support state-designated beneficial uses and healthy riparian, aquatic, and wetland ecosystems. (chapter 1, goal 1, objective 1a, strategy 1)
- Complete watershed scale improvement projects, such as road relocations or improvements, on at least three 5th-level Hydrologic Unit Code (HUC) watersheds within 15 years. Annually complete an average of three watershed improvement projects in priority watersheds, such as road/trail stabilizations, culvert replacements and dispersed campsite management. Prioritize watersheds considered in degraded condition by Winters et al., 2004 (chapter 1, goal 1, objective 1a, strategy 2)
- Manage riparian and aquatic habitat, including springs and fens, to support well distributed populations of native plant, invertebrate and vertebrate riparian and aquatic-dependent species (chapter 1, goal 1, objective 1b, strategy 11)

- Provide for motorized and nonmotorized dispersed recreation opportunities (chapter 1, goal 2, objective 2a, strategy 10)
- Provide recreation opportunities to accommodate a wide range of abilities and activities and ensure non-discrimination in the delivery of Bighorn National Forest programs. (chapter 1, goal 4, objective 4a, strategy 2)
- Improve travel management, provide a wide range of recreation opportunities, and maintain Forest facilities, buildings, roads, and trails in an efficient manner (chapter 1, goal 4)
- Maintain 20 percent of all objective maintenance Level 2 roads to standard annually (chapter 1, goal 4, objective 4a, strategy 4)
- Improve the safety and economy of Forest Service roads, trails, facilities, and operations (chapter 1, goal 4, objective 4a)

Design Features for the Proposed Action

The following design features were included to minimize effects of the proposed action:

Table 2. Willett Creek, Forest Service Road (FSR) 226 Reroute Project Design Features

Rangeland Resources	
1.	While livestock are in the unit, close any gates upon entering/leaving.
2.	Coordinate with the Rangeland Specialist to assure communication with the permittee occurs prior to the project implementation to avoid conflicts with allotment management.
Invasive Species	
3.	Integrate weed treatment and prevention into the project implementation.
4.	Keep vehicle traffic on designated roads.
5.	Use pre-determined weed free areas as equipment staging areas and when possible, avoid creating soil conditions that promote weed seed germination and establishment.
6.	Use standard provisions such as WO-C/CT 6.36 to ensure appropriate equipment cleaning.
7.	Treat weeds in road decommissioning and reclamation areas before roads are made impassable.
Wildlife	
8.	An effective closure of the section that would be decommissioned should include boulders or other barriers that effectively direct traffic from either side onto the reroute and prevent illegal vehicle travel on the old route.
Cultural Resources	
9.	During ground disturbance activities that would occur with implementation, on-site monitoring shall be conducted in the presence of the cultural resources specialist.
Aquatic and Soil Resources	
10.	If extra soil and rock fill material is available from the new road cut, it could be used to fill in the old wetland crossing route. When placing such fill an unimpeded stream course should be preserved.
11.	During road reroute construction, the construction crew should excavate plugs of sedge plants from the new crossing site before installing the concrete planks, and place them in the old crossing pool and in the wetted perimeter areas. The crew may also randomly collect sedge plugs from the wetland adjacent to the old crossing, taking care to disturb as little new soil disturbance as possible. This activity would speed the spread and recovery of wetland vegetation at the site.

All monitoring would be the responsibility of the Forest Service. The below table lists the monitoring objectives:

Table 3. Monitoring to be conducted for the proposed action *in addition to forest plan monitoring*.

	Monitoring Item	Monitoring Type	Frequency
Inspect the quality of aquatic habitats at the proposed reroute crossing of Willett Creek	The hydrology or fisheries specialist should revisit to compare preconstruction photos with post-construction conditions. If substantial progress in the reestablishment of riparian vegetation is not evident, assess the need to conduct additional work/remedial measures at the site to advance site recovery, such as adding fill to the old crossing and transplanting additional wetland vegetation.	Ocular	After two growing seasons

EFFECTS OF THE PROPOSED ACTION AND NO ACTION ALTERNATIVE

The environmental impacts of the proposed action and the no action alternative are summarized below. The environmental analysis section presents the consequences of implementing the proposed action and also provides responses to the issues listed in Table 1. A complete description of the environmental analysis is available in the specialist reports within the project record.

Effects of the Proposed Action on Aquatic and Soil Resources

Direct and Indirect: FSR 226 crosses approximately 150 feet of riparian wetland in the stream corridor. The road has become incised in the wetland such that water depths in the route can be several feet deep. Loss of wetland vegetation has occurred as the route has widened. Considerable erosion of the road approaches on either side has occurred over the years. To avoid the deep water crossing through which many users are uncomfortable driving, user-created trails have crossed the fragile riparian area in multiple unauthorized locations. These conditions have resulted in the loss of wetland habitat, considerable sediment transport into aquatic habitats, and potential decrease in the quality of fish habitat at the crossing and downstream of the crossing.

Under the proposed action, there would be a short-term increase in the potential for sediment transport to aquatic habitats when the construction activities disturb soils and vegetation proximal to the riparian corridor. Such potential would dissipate rapidly as vegetation is reestablished and the old route stabilizes. Standard Best Management Practices (BMPs) in the Region 2 Watershed Conservation Practices Handbook (2006) related to construction activities would be used during implementation of this project. These practices are followed by the Engineering Road Crew when implementing all projects on the forest in order to minimize disturbance, soil loss and water quality, and to maximize the success of vegetation reestablishment on disturbed areas. Over the long term, the length of road in the uplands would increase slightly (0.04 miles). Thus, sediment eroded from the road surface may increase proportionally. Overall soil erosion and sediment transport to riparian areas would be reduced as a

result of the installation of the new crossing. Vehicle use would likely stay within the new route because the channel crossing would be hardened and stable, and the water depth at the new low-water crossing would be shallow, thus, eliminating the need for vehicle users to seek other routes across the wetland. The new crossing would be at a location where the riparian zone is narrow, and would result in a shorter route across the wetland. Wetland vegetation would be gradually reestablished at the old crossing. Therefore, overall wetland acreage would increase after the implementation of this project. The overall quality of aquatic habitats would improve over the long-term, and impacts to fisheries resources, both at and downstream of the project, would be reduced.

Cumulative: The cumulative effects relevant to aquatic and soil resources from other activities in the area are, generally, insignificant due to the localized nature and small disturbance area of this project.

Effects of the No Action Alternative on Aquatic and Soil Resources

Direct and Indirect: Direct and indirect effects of the no action alternative on aquatic and soil conditions would remain unchanged in the short-term. Impacts to the riparian corridor would continue and the soil erosion and the loss of riparian habitat would likely expand if the road remained open and active. Off-highway vehicle users would likely continue to seek easier routes across the wetland area when water levels are high, thereby, continuing and expanding impacts to riparian zones that have previously been observed.

Cumulative: Existing conditions within the project area would continue. Therefore, cumulative effects of the no action alternative on aquatic and soil resources would not be significant.

Effects of the Proposed Action on Cultural Resources

Direct and Indirect Effects: The existing FSR 226 is part of a historic road, the Hyattville Road (a.k.a. Mail Trail; 48BH1570). The Hyattville Road (a.k.a. Mail Trail) was determined to meet the Criteria of Eligibility for the National Register of Historic Places.

On February 25, 2015, the Bighorn National Forest submitted a technical report for these investigations to the Wyoming State Historic Preservation Office (SHPO) for review. The State found that these investigations meet the Secretary of Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42) and concurred that no historic properties, as defined in 36 CFR 800.16(1)(1), would be affected by this undertaking. Their letter of concurrence was signed on April 15, 2015. Therefore, implementation of this project would have no direct or indirect effects to documented historic properties.

Cumulative effects: Implementation of the proposed action would result in the continuation of the existing condition for cultural resources throughout the analysis area.

Effects of the No Action Alternative on Cultural Resources

Cumulative effects: Implementation of the no action alternative would result in the continuation of the existing condition for cultural resources throughout the analysis area.

Effects of the Proposed Action on Livestock Grazing, Rangeland Vegetation, and Invasive Species

The project area is within the Salt Creek C&H allotment. Grazing by domestic livestock has occurred in the project area since the early 1900s. The Salt Creek Allotment Management Planning Environmental Assessment was completed during the Grazing and Vegetation Management Analysis of the Shell Canyon Allotment Management Plan Revisions and Decision Notice signed September 30, 1999. This document can be referenced for riparian, range, and watershed conditions in Chapter 3, therein.

The Salt Creek C&H allotment is permitted for mature cow/calf pairs from June 16 to October 15 under the term grazing permit number (see Table 4). Salt Creek C&H consists of eight separate pastures to maintain a deferred rotation grazing strategy. The Willett Creek, FSR 226 Reroute project is within the east/west Willett Pasture.

Table 4. Existing condition of the Salt Creek Allotment

<i>Allotment</i>	<i>Livestock #</i>	<i>Kind</i>	<i>Class</i>	<i>Use From</i>	<i>Use To</i>	<i>Days</i>	<i>AUMs</i>	<i>Total Acres*</i>	<i>Suitable Acres</i>	<i>Suitable Acres per AUM</i>
Salt Creek	486	Cattle	Mature	6/16	10/15	122	2245	15,999	7621	3.4

There are no range improvements within the project area.

Rangeland vegetation within the project area consists of ephemeral and perennial riparian corridors with dry upland meadows. The upland meadows are the primary forage areas and provide the majority of vegetation for grazing. The upland meadow species composition in the area is dominated by Idaho fescue, bluegrass species, carex species, timber oatgrass, needlegrass and junegrass. The dominant forbs in the area are false dandelion, lupine, phlox, harebell along with a variety of other forbs consistent with the Idaho fescue bunchgrass habitat type.

The project area currently has no known populations of invasive species. Invasive species populations are inventoried and treated annually by Big Horn County Weed & Pest through the grants and agreement process, and implementation is monitored by the Medicine Wheel Ranger District.

Direct and Indirect Effects on Livestock Grazing: Direct/indirect effects to livestock grazing include a potential short-term change in trailing and grazing patterns due to temporary road construction, equipment traffic, and noise. The specified design features would reduce the potential for increased disruption to annual livestock management.

Direct and Indirect Effects on Rangeland Vegetation: Direct/indirect effects to vegetation management associated with the proposed road reroute and decommissioning activities would be isolated and directly adjacent to the riparian corridor. Over the long-term, the disturbance from road construction and decommissioning activities may introduce invasive plant species that can adversely affect desired rangeland vegetation presence and production. The established design features would reduce the potential for the introduction of invasive species and competition with native vegetation.

Direct and Indirect Effects on Invasive Species: Direct/indirect effects to the presence and/or absence of invasive species from the reroute activities would vary upon the habitat available and the amount of ground disturbance that occurs. Activities associated with road construction and decommissioning would produce short-term ground disturbance conducive to increasing the potential for the introduction and/or spread of invasive species. Invasive species can impair ecological functions and alter vegetation composition, such as nutrient cycling and energy flow (Masters and Sheley, 2001). Currently, the area is not infested with invasive species. With the implementation of design features 3-7, the potential for

introduction of invasive species would be minimized. The decommissioned road and reroute would have short-term susceptibility to infestations, until such a time that the native vegetation is reestablished.

Cumulative Effects: The analysis area for cumulative effects is within the East and West Willett pasture boundary. Any negative cumulative effects on livestock grazing and rangeland vegetation from the project would be minimal, and would be no different than what has occurred in the past, present, or reasonably foreseeable future. Similar to the effect of wildlife and humans, livestock would have the potential to spread invasive species throughout the analysis area. Invasive species most commonly become established in areas where ground disturbing activities create bare ground and a seed source is present or transported to the area, which could result in a continued increase in invasive species establishment, treatment cost, and displacement and/or fragmentation of plant communities. There is the potential for an increase in noxious weeds as a result of the project. Because of ongoing treatment, early detection, rapid response (EDRR), and the proposed implementation of design features 3-7, the potential spread of known infestations or the establishment of new infestations of invasive species would be minimized.

Effects of the No Action Alternative on Livestock Grazing, Rangeland Vegetation, and Invasive Species

Direct and Indirect Effects: Under the no action alternative, vegetative conditions would remain unchanged in the short-term. Livestock grazing would continue to be managed according to the Allotment Management Plan. Widening of the riparian area would continue, and, over the long-term, would have the potential to cause a minimal increase in cumulative effects on rangeland vegetation. Under the no action alternative, no direct or indirect effects on invasive species were identified.

Cumulative Effects: Under the no action alternative, vegetation conditions would remain unchanged in the short-term. Short and long-term livestock management/ permit administration would continue to be managed through Allotment Management plans and the permit process and would not be affected under the no action alternative. Under the no action alternative, no cumulative effects on invasive species were identified.

Effects of the Proposed Action on Recreation

Direct and Indirect Effects: Direct effects of the proposed action on recreation would occur from the reopening and rerouting of the current road segment as well as the construction of a new stream crossing. The reopening and rerouting of the segment of FSR 226 would restore the desired recreation user access as prescribed under the desired conditions and guidelines for Management Area 3.31 (2005 forest plan). Illegal/unauthorized motorized travel would be reduced under both alternatives, with more reduction under the proposed action than the no action alternative. Under the proposed action, there would be a positive direct effect on safety as a result of the new narrow and shallow, hardened crossing. With the increased safety and user-friendly conditions provided by the improved crossing and the maintenance condition of the new road segment, there would be a slight increase in opportunities for motorized users with a wider range of skills, abilities, and vehicle types.

By providing a loop opportunity and reopening the trail segment with improved travel conditions, it is projected that there would be an increase in the number of motorized recreational users on the road segment. With a projected increase in motorized use, there is the potential for a slight decrease in the

semi-primitive recreation opportunities of non-motorized users (hikers, bicyclist and horseback riders). However, any changes in these opportunities would not be inconsistent with the guidelines of the semi-primitive motorized, Recreation Opportunity Spectrum (ROS) class. Therefore, direct and indirect effects on the recreation experience would not be significant.

Cumulative Effects: The past effects of the resource damage to the riparian corridor and safety concerns of the recreation users led to the decision to temporarily close the road segment. Reopening and providing a new loop/reroute on this road segment would cause a positive cumulative effect on the recreation and travel opportunities of off-highway vehicle users throughout the analysis area.

Effects of the No Action Alternative on Recreation

Direct and Indirect Effects: Under the no action alternative, the crossing would be repaired to meet maintenance level 2 standards and the existing road segment on FSR 226 would be reopened to high clearance vehicles only. There would be an improvement in safety conditions with continuation of the above maintenance. The reopening of the existing road segment and crossing on FSR 226 would restore recreation use, but could limit some users and their ability to cross the stream. However, other recreationists may find the more technical crossing an added opportunity and challenge which enhances their recreation experience.

Under the no action alternative, there would be a continuation of illegal/ unauthorized motorized use due to the technical difficulty of the existing crossing. In the past, users developed and followed alternative crossings along the riparian corridor. Maintenance to the existing crossing would lessen the effects of these illegal routes, but it would not eliminate their impacts.

The no action alternative would not fully address the safety of the motorized user. With maintenance as a level 2 road, the rider's safety when crossing the stream would increase, but the concern would not be eliminated. The crossing would still be deep and some users would not have the skills, abilities, or proper equipment to cross without concerns for their safety.

Cumulative Effects: When considering the continuation of the existing condition and maintenance of FSR 226, no cumulative effects were identified.

Effects on the Proposed Action on Wildlife and Plant Species

On April 16, 2015, a list of threatened, endangered, proposed and candidate wildlife and plant species that may be present in the project area was requested and received from the U.S. Fish and Wildlife Service through the Information, Planning and Conservation System (IPaC) website (<http://ecos.fws.gov/ipac/>). This list included the Canada lynx (*Lynx canadensis*) a threatened species, and the gray wolf (*Canis lupus*) which is listed as an Experimental Population, Non-Essential in the State of Wyoming. No "critical habitat" has been designated for the Canada lynx, gray wolf, or any other federally listed species on the Bighorn National Forest. Endangered, threatened, proposed, and candidate plant species for the forest were also identified from the list. No further analysis is needed for species that are not known or suspected to occur in the project area and for which no suitable habitat is present. Tables 5-7 provide an analysis of the direct, indirect, and cumulative effects of the proposed action on wildlife and plant species.

Table 5. Effects of the Proposed Action on Threatened, Endangered, Proposed, and Candidate Species

Common/ Scientific Name	Status	Species known/suspected to be present in project area?	Suitable habitat present in project area?	Designated Critical Habitat present or could be affected?	Direct, indirect, and cumulative effects of the proposed action
Canada Lynx (<i>Lynx canadensis</i>)	Threatened	No	No	No	There are no LAUs within the project area, and no key linkage habitat. The project would not create a disruption of any habitats since there is none in the project area. The Bighorn National Forest is considered by the USFWS to be unoccupied by Canada lynx. There would be no direct, indirect, or cumulative effects from the proposed action. The determination would be “ no effect ” to the lynx.
Gray wolf (<i>Canis lupus</i>)	Non-essential Experimental	No	Yes	No	While wolves have been intermittently sighted on the Bighorn National Forest, it is not known if any packs have been established or whether any dens occur. This project would not change the conditions or amount of disturbance analyzed with the Forest Plan, and would retain habitat as potential habitat for the wolf, including its prey. This project is consistent with the effects determination made within the BA and the corresponding Biological Opinion issued by the USFWS. Based on a lack of known occurrence and no disturbances to habitat through the proposed action, there would be no direct, indirect, or cumulative effects from any of the alternatives. The determination of this project for the gray wolf would be “ no effect. ”
Greater Sage Grouse <i>Centrocercus urophasianus</i>	Candidate	No	No	No	Analyzed as a sensitive species below.

Table 6. Effects of the Proposed Action on Sensitive Wildlife Species

Common/ Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
Birds				
American Peregrine Falcon (<i>Falco peregrinus</i>)	Sensitive	No	No	Prefer open habitat with cliffs present; optimal cliffs dominate the surrounding landscape. No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “ no impact. ”

Common/ Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
Greater Sage Grouse (<i>Centrocercus urophasianus</i>)	Candidate, but analyzed as Sensitive	No	No	Requires large, interconnected expanses of sagebrush with healthy, native understories (USFWS, 2010). No sagebrush present in project area, and no known occurrences, so the species was excluded from further analysis. The determination is “ no impact. ”
Northern Goshawk (<i>Accipiter gentilis</i>)	Sensitive	No	No	Forages in a variety of forested areas and small openings; nests primarily in dense mature conifer forests (Kennedy, 2003). No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “ no impact. ”
Northern Harrier (<i>Circus cyaneus</i>)	Sensitive	Yes Suspected to occur	Yes	Open country in medium/tall grass prairies and associated wetlands, marshes, and meadows. No known occurrences, but suspected to occur due to observations adjacent to project area. Project activities would be a benefit over the no action alternative because it would improve riparian habitat through an improved crossing. The direct and indirect effects would be incalculable and there would be no cumulative effects above those already occurring. The determination is “ no impact ”
Flammulated Owl (<i>Otus flammeolus</i>)	Sensitive	No	No	Open ponderosa pine forests (Hayward and Verner, 1994). Project area contains no ponderosa pine habitat and no known species occurrences, so the species was excluded from further analysis. The determination is “ no impact. ”
Boreal Owl (<i>Aegolius funereus</i>)	Sensitive	No	No	Typically associated with old-growth conifer forest types, primarily in spruce-fir and aspen (Hayward and Hayward 1993). No known occurrences in project area, and no known habitat so the species was excluded from further analysis. The determination is “ no impact. ”
Short-eared Owl (<i>Asio flammeus</i>)	Sensitive	No	Limited	Forages in mosaic sagebrush areas and edges of open areas with grass (Holt and Leasure 1993). Ground nesting species known to occur on the Forest in meadows/shrub communities. Uncommon residents in the open habitats of the Forest. There is potential habitat present within the project area, but no confirmed occurrences. No project disturbances to habitat or species would result from the proposed action so no direct, indirect or cumulative effects. The determination is “ no impact. ”
Lewis’ Woodpecker	Sensitive	No	No	Prefers open burned areas with large snags; oak and cottonwood forests, and open, park-like ponderosa

Common/ Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
<i>(Melanerpes lewis)</i>				pine forests. No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “no impact.”
Olive-sided Flycatcher <i>(Contopus cooperi)</i>	Sensitive	No	Yes	Typically occurs in mature conifer and forages in forest openings or disturbed mature forest conditions using snags on edges of forest openings. (Altman, B., and R. Sallabanks. 2000). Known to occur on Forest in these habitat types. There are likely occurrences in the project area, though no known observations. No project disturbances to habitat or species from proposed alternative so no direct, indirect or cumulative effects. The determination is “no impact.”
Loggerhead Shrike <i>(Lanius ludovicianus)</i>	Sensitive	No	No	Prefers open country with scattered, low deciduous thickets. Known to occur primarily on the east side of the Forest in lower elevation grasslands. Project area contains no habitat and no species occurrences, so the species was excluded from further analysis. The determination is “no impact.”
Brewer’s Sparrow <i>(Spizella breweri)</i>	Sensitive MIS	No	No	Occurs in sagebrush habitats and uses early or late shrub stages having an understory of herbaceous vegetation and brushy cover. No sagebrush present in project area, and no confirmed occurrences, so the species was excluded from further analysis. The determination is “no impact.”
Grasshopper Sparrow <i>(Ammodramus savannarum)</i>	Sensitive	No	No	Occurs in grass/sagebrush habitats and prefers larger patches of grassland, usually with few shrubs or trees; specific preferences vary in different parts of the range (Vickery, 1996). No known suitable habitat is present within project area, and no known species occurrences, so the species was not analyzed further. The determination is “no impact.”
Sage Sparrow <i>(Amphispiza bellii)</i>	Sensitive	No	No	Generally prefers semi-open habitats with evenly spaced shrubs 1-2 m high. Suspected to occur in lower elevation sagebrush habitats on the Forest, but presence on Forest has not been confirmed. No sagebrush present in project area, and no confirmed occurrences, so the species was excluded from further analysis. The determination is “no impact.”
Harlequin Duck <i>(Histrionicus histrionicus)</i>	Sensitive	No	No	Prefer clear, fast-flowing rivers and streams during the breeding season (Robertson, et al., 1999). Historic and one recent observation in 2005 on the north end of forest in the Little Horn river. No suitable habitat (large boulder dominated riparian) or known

Common/ Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
				occurrences present in project area, so the species was excluded from further analysis. The determination is “no impact.”
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Sensitive	No	No	Prefer nesting areas with low human disturbance, suitable forest structure, and abundant prey. In winter, eagles aggregate near ice-free waters, seclusion from human activity (USFWS, 1983). Bald eagles are known to only use the Forest as foraging habitat during migration periods. No winter roosting or nesting is known to occur on the Forest. Project area contains no habitat and no known species occurrences, so the species was excluded from further analysis. The determination is “no impact.”
Mammals				
North American Wolverine (<i>Gulo gulo</i>)	Sensitive	No	No	Use higher elevations in summer versus winter, and shift use of cover types from spruce-fir in summer to lower elevation Douglas fir and lodgepole pine communities in winter. Infrequent occurrence on the Forest, most likely in wilderness or remote un-roaded areas, in both mature conifer or alpine meadows or rock fields. Project area contains no habitat and no known species occurrences, so the species was excluded from further analysis. The determination is “no impact.”
American Marten (<i>Martes americana</i>)	Sensitive	No	No	Spruce forests with complex near-ground structure, extending into adjacent ponderosa pine stands (Buskirk, 2002). Widespread occupancy scattered on the Forest. Project area contains no habitat and no known species occurrences, so the species was excluded from further analysis. The determination is “no impact.”
Rocky Mountain Bighorn Sheep (<i>Ovis canadensis canadensis</i>)	Sensitive	No	No	Prefer cliffs, rock outcrops, and nearby meadows. Limited, primarily, to areas around Shell Canyon and Devils Canyon (USFS, 2005), of which the Devil’s Canyon herd is north of the project area about 6 miles. Project area contains no potential habitat and no confirmed species occurrences, so the species was excluded from further analysis. The determination is “no impact.”
Townsend’s Big-eared Bat (<i>Corynorhinus townsendii</i>)	Sensitive	No	No	Forages on insects in a variety of habitats including forested and wet areas; requires suitable roosts in a variety of structures including caves, mines, rocky ledges and overhangs. Project area contains no potential habitat of cliffs or limestone pits and no

Common/ Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
				known species occurrences, so the species was excluded from further analysis. The determination is "no impact."
Spotted Bat (<i>Euderma maculatum</i>)	Sensitive	No	No	Prefers to roost in rock crevices. Occasionally found in caves and buildings. Cliffs provide optimal roosting habitat. Project area contains no potential habitat of rock crevices, caves, or buildings. There are no known species occurrences, so the species was excluded from further analysis. The determination is "no impact."
Hoary bat (<i>Lasiurus cinereus</i>)	Sensitive	No	Yes	Primarily in montane coniferous forests; selecting day roost sites based on tree height and proximity to water. Most preferred sites in lodgepole dominated forested lands is mature forests with an open understory, while choosing roosts with more edge effect than those without. Potential suitable habitat in project area, but no known occurrences. No project disturbances to habitat or species from proposed alternative so no direct, indirect or cumulative effects. The determination is "no impact."
Fringed Myotis (<i>Myotis thysanodes</i>)	Sensitive	No	Yes	Found at high elevations in spruce habitat and mixed ponderosa pine, spruce and aspen habitat; roosts in a variety of structures including caves, mines, tunnels, snags and buildings. No project disturbances to habitat or species from proposed alternative so no direct, indirect or cumulative effects. The determination is "no impact."
Water Vole (<i>Microtus richardsoni</i>)	Sensitive	No	No	Prefers burrows in stream banks, with many of the passageways opening directly into the water. Habitat is low gradient streams with sedges/willows. No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is "no impact."
Amphibians				
Northern Leopard Frog (<i>Lithobates pipien</i>)	Sensitive	No	No	Inhabits riparian and wetland areas for tadpoles, sub-adults, and breeding adults; adults forage in upland habitats. These frogs are known to occur at several locations on the Forest, including Meadowlark Lake and Goose Creek drainage which are both well outside of the project area. No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is "no impact."

Common/ Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
Columbia Spotted Frog (<i>Lithobates luteiventris</i>)	Sensitive	No	No	Occurs in riparian areas, where emergent vegetation and standing water are present, within the sage-juniper shrublands. These frogs are currently only known on the North and South Tongue drainages of the Forest outside the project area. No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “no impact.”
Wood Frog (<i>Lithobates sylvatica</i>)	Sensitive	No	No	Generally inhabits moist, lowland deciduous forests, and breeds in pools lacking fish. Wood frogs are freeze tolerant and winter under leaf litter and duff, or in shallow burrows. These frogs are known to several areas of the Forest, but none of the locations occur in the project area. No known or suspected habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “no impact.”
Mollusks				
Cooper’s Rocky Mountain Snail (<i>Orechelix strigosa cooperi</i>)	Sensitive	No	No	Habitat is currently thought to be associated with forested canyons, in large boulder dominated riparian areas below 8,000 feet. In contrast to other land snails, Cooper’s snail can thrive with little cover and thin litter (Anderson, 2005). No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “no impact.”
Pygmy Mountain Snail (<i>Oreohelix pygmaea</i>)	Sensitive	No	No	Habitat is similar to the Cooper’s as described above. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is “no impact.”

Table 7. Effects of the Proposed Action on Sensitive Plant Species

Common/Scientific Name	Status	Species known/suspected to occur in project area?	Suitable Habitat Present in project area?	Direct, indirect, and cumulative effects of the proposed action
Upward lobe- moonwort (<i>Botrychium ascendens</i>)	Sensitive	No	Limited	This species is found in montane short and tall riparian willow communities with high moss, gravel, and cobble ground cover, on volcanic or granitic alluvium at 8,000’ – 9,000’ elevation. Plants are also found on slight knolls above wet meadows. Limited habitat and no known species

				occurrences in the project area. A summary of the detailed analysis follows this table.
Peculiar moonwort (<i>Botrychium paradoxum</i>)	Sensitive	No	Limited	Habitat includes mesic sites such as lake shores, and has been found in open meadows and grassy slopes. It is often on disturbed sites, and found at elevations ranging from 4,000' to 8,000'. It has been found on rotting plant material under dense cover. Associated species include <i>Abies</i> spp., <i>Pinus contorta</i> , <i>Salix</i> spp. and <i>Potentilla</i> spp. Limited habitat and no known species occurrences in the project area. A summary of the detailed analysis follows this table.
Lesser Panicked Sedge (<i>Carex diandra</i>)	Sensitive	No	Yes	<i>C. diandra</i> is found in fens, floating and non- floating moss mats, pond edges, and hummocks in open shrub and sedge meadows at 6,100-9,700 feet. Surveys for fens and associated species by Heidel et al. (2011a), found <i>C. diandra</i> on east side of forest. One fen known in the project area, but species not found in surveys by Heidel et al. (2011a). A summary of the detailed analysis follows this table.
Mountain lady's slipper (<i>Cypripedium montanum</i>)	Sensitive	No	No	<i>C. montanum</i> is found in shady forests at middle elevations. It occurs with <i>Betula</i> and <i>Populus</i> in areas with thick forb ground cover at elevations ranging from 5,000'-6,000 feet. Project area is about 9,200 feet which is well above known elevations for this species. All the occurrences have been found on the east side of the Forest. No known habitat and no species occurrences in the project area, so excluded from further analysis. The determination is " no impact. "
Yellow lady's slipper (<i>Cypripedium parviflorum</i>)	Sensitive	No	No	This species is found in damp, mossy woods, along stream sides, and in bogs at 4,000-6,400' elevation. It is primarily found in calcareous soils. Project area is about 9,200 feet which is well above known elevations for this species. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "
English sundew (<i>Drosera anglica</i>)	Sensitive	No	No	In Wyoming, this species is found in floating peat mats and shallow pools of poor to transition fens from 6,200-8,920 feet. Surveys for fens and associated species by Heidel et al. (2011a), found <i>D. anglica</i> on east side of forest in two locations, but not in the project area. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "
Russet cotton-grass or Chamisso's cottongrass (<i>Eriophorum chamissonis</i>)	Sensitive	Yes	Yes	In Forest Service Region 2, this species is typically found in subalpine wet meadows and fens with saturated peat soils. In Wyoming it ranges from 7,800 to 9,500 feet elevation. This species is known to occur in the project area and a summary of the detailed analysis follows this table.
Slender bristlegrass (<i>Eriophorum gracile</i>)	Sensitive	No	Yes	This species is typically found in fens and subalpine wet meadows with saturated soils at about 6,900-9,240 feet. Surveys for fens and associated species by Heidel et al. (2011a), found <i>E. gracile</i> on east side of forest, but not in the project area. A summary of the detailed analysis follows this

				table.
Hall's Fescue or plains rough fescue (<i>Festuca hallii</i>)	Sensitive	No	No	This species occupies montane meadows from 6,800-11,000'. It is usually found on soils derived from calcareous parent material. Associated plants include other <i>Festuca</i> spp., <i>Danthonia</i> spp. <i>Artemisia</i> spp., <i>Lupinus</i> spp., and <i>Potentilla</i> spp. It is known from a vague 1890's occurrence on the forest; however this occurrence has not been relocated, nor have others been found in surveys by Fertig (2002a). Fertig (2002a) conducted modeling and field sampling of <i>F. hallii</i> on the Bighorn National Forest, and based on these efforts this plant does not likely occur on the forest. As a result this species was not analyzed in detail. There should be no direct, indirect, or cumulative effects from this project. Determination is " no impact. "
Grass-of-Parnassia (<i>Parnassia kotzebuei</i>)	Sensitive	No	No	This species occurs in moist seeps, grassy, wet tundra on thin clay soils, and moist ledges below steep talus slopes from 9,400-11,200'. Two known occurrences are on the forest but none are within the analysis area. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "
Cary's beardtongue (<i>Penstemon caryi</i>)	Sensitive	No	No	This species occupies calcareous rock outcrops and rocky soil within sagebrush, juniper, Douglas fir, and limber pine communities between 5,200-8,500 feet. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "
Woolly twinpod (<i>Physaria didymocarpa</i> var. <i>lanata</i>)	Sensitive	No	No	This species occupies slopes and road cuts with red scoria & clay shale substrates. Habitat also includes calcareous substrates and gravelly unstable slopes at 3,600-9,680'. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "
Tranquil goldenweed (<i>Pyrrocoma clementis</i> var. <i>villosa</i>)	Sensitive	No	No	In Wyoming, this species is found in montane meadows, often on limestone substrates in the vicinity of, but not directly associated with sagebrush (Heidel, 2011). It is typically found at 7,000 to 9,000 feet elevation. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "
Nagoonberry or northern blackberry (<i>Rubus arcticus</i> ssp. <i>acaulis</i>)	Sensitive	No	No	This species is known to occur in moderate to dense canopy cover in spruce, spruce/willow, and occasionally willow dominated communities from 7,000-9,000'. Only two known populations occur on the south end of the Forest on Sourdough Cr. and Muddy Creek. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is " no impact. "

Lesser bladderwort (<i>Utricularia minor</i>)	Sensitive	No	No	This species is found submerged in ponds and slow moving streams at 6,600-8,600'. Currently known to one location on Forest. No known habitat and no species occurrences in the project area, so the species was excluded from further analysis. The determination is "no impact."
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The no action alternative would allow continued disturbances to occur in the wetland area which is immediately adjacent to a known sensitive plant population (*Eriophorum chamissonis*), and potential habitat for *Eriophorum gracile*, *Carex diandra*, *B. ascendens*, and *B. paradoxum*. Should this off-highway vehicle use continue and expand, there is potential for negative effects to occur to habitat or plants. The determination of the no action alternative for these species of "may adversely impact individuals, but not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing" is based on the present environment and the possibility that illegal off-highway vehicle use may expand further. Overall, the proposed action would have a positive effect and be a benefit to those species and/or their habitat that may be present in the project area. The proposed action is considered a benefit over the no action due to an improved crossing that would place vehicles farther away from habitat for several plant species. "Beneficial impact" determinations were made largely based on relocating the crossing downstream of the existing population and known habitat for other plant species, as well as the decommissioning of the old crossing. With confidence it could be stated that the conditions resulting from this project compared to predicted conditions of no action, would not cause a trend toward federal listing for any of the sensitive species, or a loss of viability in the planning area or across the range of the species. This rationale was used to support the determinations. "No impact" determinations were made largely because of the lack of habitat or no known or potential occurrence of a species in the project area, or areas to be disturbed through management activities.

The following is a summary of the detailed analysis of direct, indirect, and cumulative effects on wildlife and plant species:

- Threatened species:
 - Canada lynx: The no action alternative and proposed action alternatives would have "no effect."
- Experimental Population, Non-essential:
 - Gray wolf - The no action alternative and proposed action alternatives would have "no effect."
- Forest Service sensitive species:

The no action alternative and proposed action alternatives would have "no impact" for the following species:

 - Amphibians: Northern leopard frog, Columbia spotted frog, wood frog.
 - Birds: flammulated owl, harlequin duck, Bald Eagle, Brewer's sparrow, grasshopper sparrow, sage sparrow, loggerhead shrike, Lewis' woodpecker, Short-eared owl, Northern harrier, Peregrine falcon, Greater Sage-Grouse, northern goshawk, Boreal owl, olive-sided flycatcher
 - Mammals: wolverine, Rocky Mountain Bighorn Sheep, Townsend's big-eared bat, spotted bat, water vole, American marten, fringed-tailed myotis, hoary bat
 - Mollusks: Cooper's Rocky Mountain Snail, Pygmy Mountain Snail

- Plants: Mountain lady’s slipper, Yellow lady’s slipper, English sundew, Hall’s Fescue, Grass-of-Parnassia, Cary’s beardtongue, Woolly twinpod, Tranquil goldenweed, Northern blackberry, Lesser bladderwort
- The no action alternative would have a determination of “may adversely impact individuals, but not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing” for the following species:
 - Plants: Upward lobe-moonwort, Peculiar moonwort, Lesser Panicked Sedge, Russet cotton-grass, Slender bristlegrass
- The proposed action would have a determination of “beneficial impact” for the following species:
 - Plants: Upward lobe-moonwort, Peculiar moonwort, Lesser Panicked Sedge, Russet cotton-grass, Slender bristlegrass
- Management Indicator Species: The project is consistent with the objectives and strategies and guidelines established for MIS in the Revised Forest Plan.
- Species of Local Concern and Demand Species: This project would not change the conditions associated with the viability determination made in the Revised Forest Plan FEIS for species that occur in the project area.

Effects of the Proposed Action and No Action Alternative on Roadless Characteristics

From spring to fall, the Willet Creek Forest Service Road 226 is used by a wide variety of off-highway vehicles (OHV) including all-terrain vehicles, jeeps, four-wheel drive trucks, single-track motorcycles, and utility-task vehicles along with non-motorized uses such as horseback riders and hikers. The project is in a Roadless Area Conservation Rule designated area. The project area includes approximately 0.6 acres, all on National Forest System land within the Roadless Area Conservation Rule designated area known as Cloud Peak Contiguous North (B031) which consists of 17,425 acres; thus, the proposed new disturbance area is 0.00003% of the total roadless area. As a result of off-highway vehicle use over the past six or more decades, the roadless characteristics of the Cloud Peak Contiguous North roadless area have been previously impacted within an existing area of disturbance to soil, water, wildlife, and plants. Providing designated Forest System Roads for off-highway vehicles has been a critical management action taken over the last 10 years to minimize impacts to the roadless characteristics.

Table 8. Direct, indirect, and cumulative effects of the proposed action and no action alternatives on roadless characteristics.

Roadless Area Characteristic	Current Condition in Project Area	Effects of the Proposed Action	Effects of the No Action Alternative
High quality or undisturbed soil, water, and air.	There are no sensitive soil types in the portion of the project area within the roadless area boundary, and the soil was disturbed at the existing crossing and at illegal crossings created by OHV trails.	Disturbance to the cryoquoll (wetland) soil type would be minimized by creating a perpendicular stream crossing to the stream flow. Also, this crossing is at the narrowest point of the riparian area. The former	Impacts to the riparian corridor would continue soil erosion and the loss of riparian habitat would likely expand and OHVs would likely continue to create social trails through the riparian corridor which would expand impacts beyond the existing condition. Any direct,

Roadless Area Characteristic	Current Condition in Project Area	Effects of the Proposed Action	Effects of the No Action Alternative
		crossing would be reestablished over time. Sedge plugs would be used to increase the success of riparian reestablishment. No significant direct, indirect, or cumulative effects would occur.	indirect, or cumulative effects would not exceed the threshold of significance.
Diversity of plant and animal communities	Project is located in a high elevation mountain meadow with a perennial fish bearing stream (unnamed tributary to Willett Creek) flowing through it. Vegetation and wildlife species are similar to other areas on the Medicine Wheel Ranger District that contain high elevation mountain meadow habitat.	The effects to habitat and species from the proposed road reroute are imperceptible at the Forest scale, as the area is already roaded and the project area only encompasses 0.6 acres. The proposed action would not have a significant effect on roadless characteristics related to diversity of plant and animal communities.	With the continuation of the existing condition, there would be no significant direct, indirect, or cumulative effects on the diversity of plant and animal communities.
Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land	See Table 5 for determinations of presence of species within the project area	The FEIS in the Forest Plan states that wildlife species and ecological systems on the Bighorn NF which occur outside of existing wilderness do not require roadless for protection. There would be no direct, indirect, or cumulative effects to any Threatened or Endangered species for wildlife and botany. The effects determination of this project for the Canada lynx and gray wolf would be “no effect” from any of the alternatives.	With the continuation of the existing condition, there would be no significant direct, indirect, or cumulative effects.
Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classes of dispersed recreation	The recreation opportunity spectrum (ROS) class for the portion of the project area within the roadless area boundary is semi-primitive motorized; however, the	The existing condition of a semi-primitive motorized recreation opportunity would continue. Therefore, there would be no significant direct, indirect, or cumulative effect on this	With the continuation of the existing condition, there would be no significant direct, indirect, or cumulative effects.

Roadless Area Characteristic	Current Condition in Project Area	Effects of the Proposed Action	Effects of the No Action Alternative
	existing scenic integrity resulting from past timber harvest makes the ROS more consistent with a roadless modified class.	roadless area characteristic.	
Natural appearing landscapes with high scenic quality	Existing condition is low scenic integrity. The Scenic Integrity Objective is Moderate.	The existing condition of low scenic integrity would change to moderate over time. There would be no significant direct, indirect, or cumulative effect on this roadless area characteristic.	With the continuation of the existing condition, there would be no significant direct, indirect, or cumulative effects.

COMPLIANCE WITH OTHER LAWS AND REGULATIONS

The following Laws and Regulations were considered for compliance of the environmental analysis:

National Forest Management Act
 Endangered Species Act
 National Historic Preservation Act
 Executive Order 12898 – Environmental Justice
 Clean Water Act
 Executive Order 11990 – Protection of Wetlands
 Executive Order 11988 – Floodplain Management
 Forest and Rangeland Renewable Resources Planning Act
 The Organic Act, as amended
 Multiple Use-Sustained Yield Act
 National Trails System Act
 Travel Management Rule
 36 CFR 219 (Planning) and 36 CFR 222 (Range Management)
 Rescissions Act
 Federal Noxious Weed Act
 Native American Graves Protection and Repatriation Act
 Fish and Wildlife Act
 Fish and Wildlife Coordination Act
 National Environmental Policy Act
 Executive Order 12962 – Recreational Fisheries

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FIGURE 1: PROPOSED WILLETT CREEK, FSR 226 REROUTE PROJECT MAP

