



Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Rocky Mountain Region, Bighorn National Forest

PALS ID #64474

December 2025

Tensleep Canyon Climbing Management Plan

Draft Environmental Assessment



Tensleep Canyon. USDA Forest Service Ryan Sorenson

For more information, contact:

Mike Thom, Powder River District Ranger
1415 Fort Street
Buffalo, WY 82834
307-684-4636

<https://www.fs.usda.gov/r02/bighorn/projects/64474>

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Introduction

Tensleep Canyon is one of the most popular rock-climbing destinations in the northern Rocky Mountains, with over 1,350 established climbing routes. The exposed rocky outcrops have climbing features similar to much of the limestone and dolomite rock found in popular European areas, such as Italy and France, that are internationally known for their sport climbing. Tensleep Canyon provides a unique climbing opportunity due to its vast supply of climbs, access to camping opportunities, and short approaches.

As the popularity of sport climbing has increased nationwide over the past several decades, recreational rock climbing in Tensleep Canyon has followed suit. Increased use in the area has led to environmental and social concerns including overcrowded parking and roadway safety along U.S. Highway 16 and National Forest System Road 18 (Road 18), health and environmental concerns from human and pet waste, user-created trails causing degrading slopes and soil erosion, including threats to natural and cultural resources, wildlife, botanical species, and geological resources.

All lands within Tensleep Canyon are ancestral homelands to the following American Indian tribes: Cheyenne River Sioux, Ogalala Sioux, Crow, Fort Belknap Gros Ventre and Assiniboine, Fort Peck Sioux and Assiniboine, Northern Arapaho, Northern Cheyenne, Rosebud Sioux, Mandan, Hidatsa and Arikara Nation Tribes, and Standing Rock Sioux Tribes. Working collaboratively with these tribes was identified as integral to future management decisions within the Tensleep Canyon Climbing Management Plan project area.

The Bighorn National Forest has made previous attempts to manage climbing impacts in Tensleep Canyon. In 2019, the Forest issued a notice which prohibited the development of new climbing routes and trails on the Bighorn National Forest, including in Tensleep Canyon, per regulations at 36 CFR § 261.9(a) and § 261.10(a). These regulations prohibit damaging natural features and constructing unauthorized trails, respectively. The 2019 enforcement notice also indicated that the Bighorn National Forest would prepare a climbing management plan to more effectively manage climbing activities in the area, which is consistent with direction laid out in the 2005 Bighorn National Forest Revised Land and Resource Management Plan (hereafter referred to as “the forest plan”):

“Objective 2.a: Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities...”

Strategy 11: Inventory existing rock climbing routes including approach, associated trail locations, and human impact. Within 10 years, develop climbing management plans for two areas on the Forest where routes are established or are being established” (USDA 2005).

In 2021, the Forest Service began the process of developing a climbing management plan; however, due to staff turnover the project was put on hold, which also allowed the Forest Service to collect additional data regarding climbing and recreational use. In 2022, the Bighorn National Forest hired a climbing ranger and inventoried all climbing routes and user-created trails in Tensleep Canyon. In 2023, the Forest Service reinitiated the Tensleep Canyon Climbing Management Plan project.

This environmental assessment (EA) and its appendices are collectively referred to as the Tensleep Canyon Climbing Management Plan, which has been developed by Forest Service staff with input from the public, tribes, and local climbing organizations. This EA is to be used in combination with relevant standards and guidelines identified in the forest plan, the implementation process outlined in **Appendix B: Implementation Guide**, and the best practices identified in the “Best Practices for Development and Rebolting in the Bighorn Mountains and Bighorn Basin” document developed by the Bighorn Climbers Coalition (BCC 2025).

The Forest Service prepared this EA in compliance with the National Environmental Policy Act (NEPA) (42 U.S.C. 4321–4347, as amended by the Fiscal Responsibility Act of 2023) and Forest Service NEPA regulations (36 CFR Part 220). These regulations have since been rescinded and replaced with USDA NEPA regulations (7 CFR Part 1b); however, this project was initiated prior to those changes and is therefore conducted under the previous regulations. The analysis of environmental effects will inform the responsible official’s determination of significance under NEPA, and whether or not to prepare a finding of no significant impacts (FONSI) or an environmental impact statement (EIS).

Project Location

The Tensleep Canyon Climbing Management Plan project area encompasses 26,544 acres located on the Powder River Ranger District of the Bighorn National Forest (**Figure 1**). Tensleep Canyon surrounds a 5-mile stretch of U.S. Highway 16, also known as the Cloud Peak Skyway Scenic Byway, which travels from Ten Sleep to Buffalo, Wyoming. The project area encompasses National Forest System (NFS) lands on either side of U.S. Highway 16 between the Bighorn National Forest boundary to the southwest (milepost 34) and the Big Horn/Washakie County boundary to the northeast (milepost 44). Road 18, also known as the “Old Highway,” runs parallel to U.S. Highway 16 on the opposite side of Tensleep Creek through a portion of the project area. The project area also includes a portion of Leigh Creek Canyon that is within the Leigh Creek Inventoried Roadless Area (IRA) and Leigh Creek Research Natural Area (RNA).

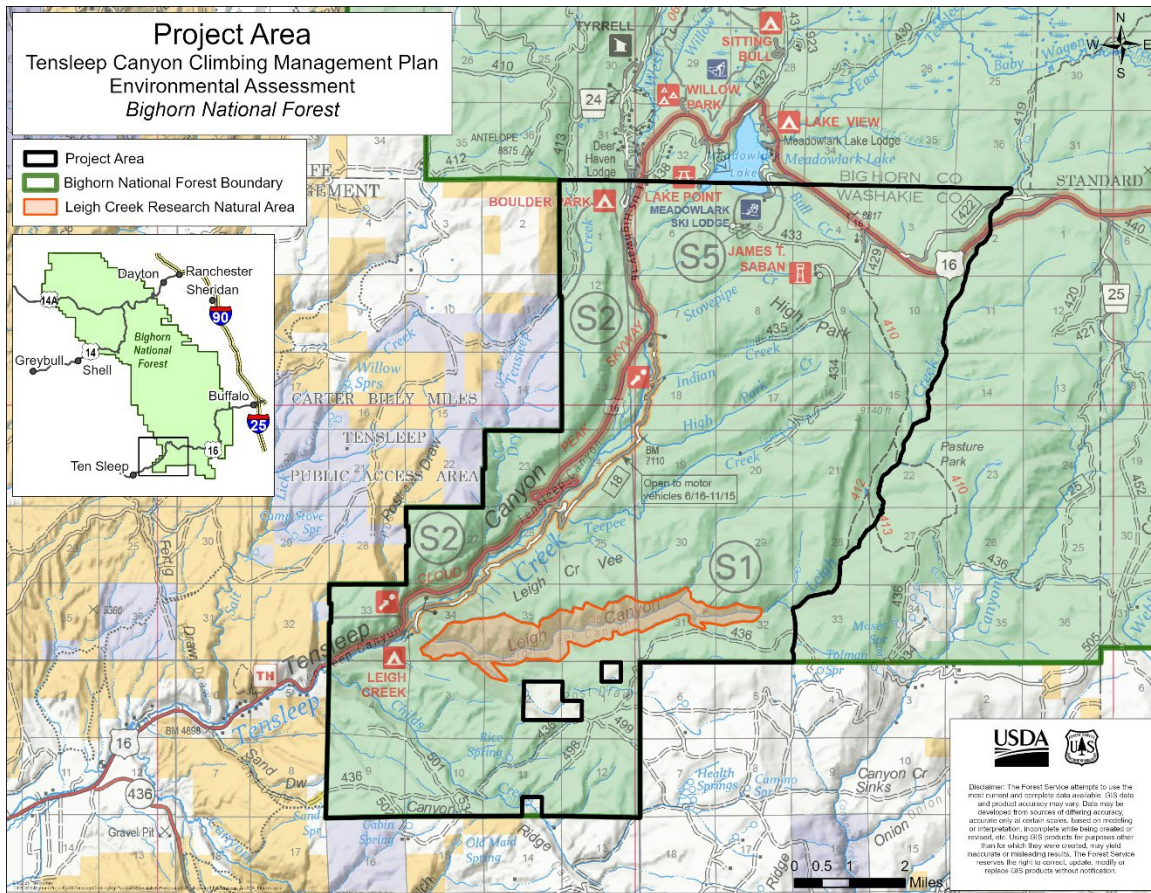


Figure 1. Vicinity map of project area

Purpose and Need for the Proposal

Rock climbing and associated recreation activities affect the natural and cultural resources in Tensleep Canyon. The Bighorn National Forest needs a climbing management plan to effectively manage rock climbing and associated recreational activities to support the continued enjoyment of rock climbing, to minimize user conflict, and to protect the area's resources in a manner that is consistent with the forest plan. Specifically, there is a need to:

- Provide a diverse user experience for rock climbers of all skill levels.
- Provide safer parking and access to cliff habitat where rock climbing occurs.
- Reduce erosion and sedimentation from user-created footpaths, staging areas, and dispersed camping sites.
- Protect riparian resources.
- Protect special status wildlife and plant species.
- Protect cultural and tribal resources.
- Protect geological resources.
- Maintain natural ecological conditions in Leigh Creek Research Natural Area.

The Tensleep Canyon Climbing Management Plan responds to direction in the forest plan to inventory climbing routes, trails, and impacts, and directs the Forest to prepare a climbing management plan (Objective 2.a, Strategy 11; USDA 2005). The Tensleep Canyon Climbing

Management Plan also addresses non-compliance with forest plan Standard Soil, Water, Riparian, and Wetland 1:

“In the water influence zone (WIZ), allow only those actions that maintain or improve long-term stream health and riparian ecosystem condition. The WIZ is the aquatic ecosystem, the riparian ecosystem, characterized by distinct vegetation and associated valley bottom (Winters et al. 2003 2004), wetlands, and ecosystems that remain within approximately 100 feet horizontally from both edges of all perennial and intermittent streams and from the shores of lakes and other still water bodies. It includes adjacent, unstable and highly erodible soil” (USDA 2025).

See **Appendix C: Forest Plan Consistency Review** for descriptions of applicable goals, objective, standards, guidelines, and management areas (**Figure 2**) from the forest plan and documentation of the proposed project’s compliance with the forest plan.

Additionally, Leigh Creek RNA, which falls within the project area, was recently elevated from a proposed RNA to an officially designated RNA. The “Establishment Record for the Leigh Creek Research Natural Area” (USDA 2025) directs the Forest Service to incorporate RNA goals and objectives in the climbing management plan and remove climbing infrastructure that is incongruent with the RNA.

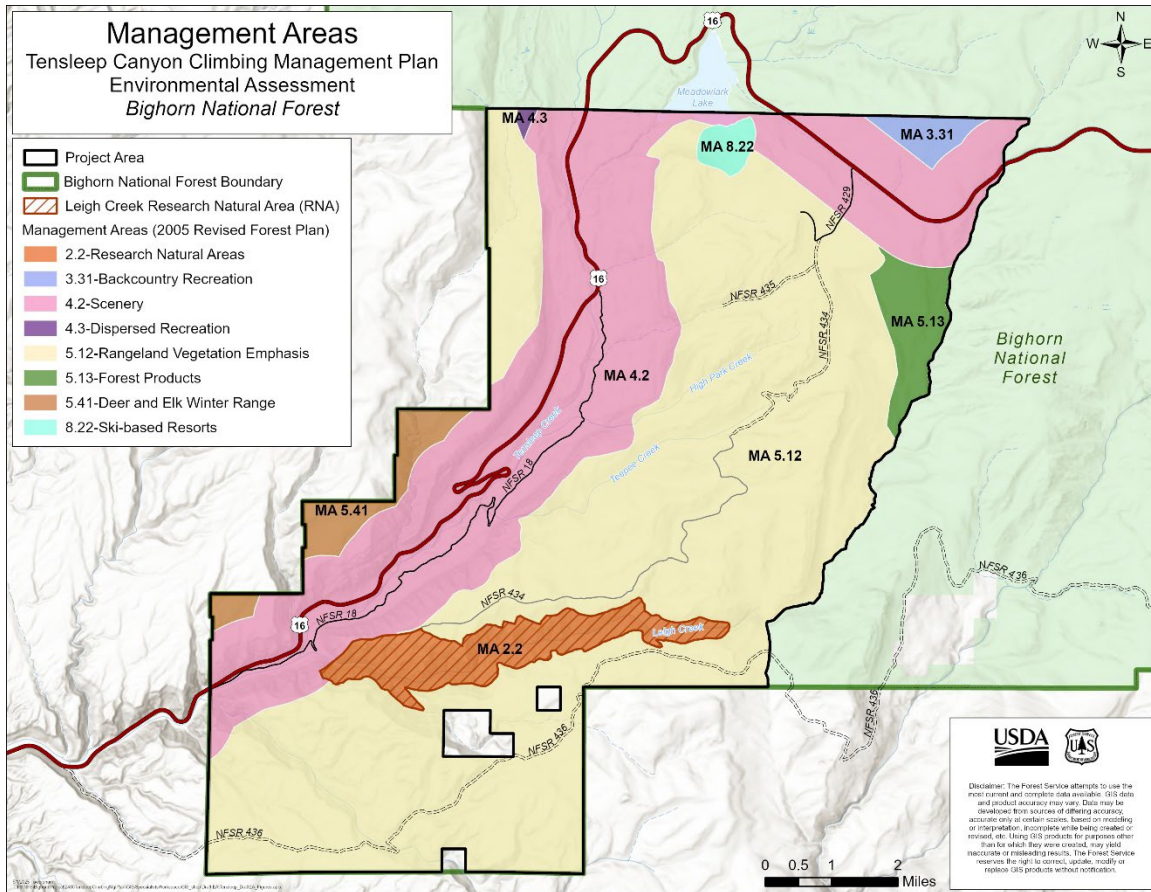


Figure 2. Forest plan management areas

Public Involvement, Coordination, and Identification of Issues

The Forest Service conducted scoping in compliance with NEPA regulations at 36 CFR § 220.4(e) during two separate scoping periods. In 2021, the Forest Service held a 30-day public scoping comment period from February 5 to March 8, 2021, and conducted two open house meetings. Scoping materials included a detailed description of the proposed action and associated maps. The Forest Service received 470 comments related to climbing route development, sustainable recreation infrastructure, parking capacity and safety, waste management, and impacts to natural resources. However, the project was put on hold in late 2021 due to staff turnover.

In 2023, the Forest Service reinitiated the Tensleep Canyon Climbing Management Plan project and conducted a second 30-day public scoping comment period from October 26 to November 24, 2023. Scoping materials included a scoping letter which outlined the purpose and need for the project and the preliminary proposed action, in addition to several maps of the project area. The Forest Service also held two public meetings (virtual and in-person) to provide information and answer questions. During the 2023 scoping period, the Forest Service received 131 comment submissions from members of the public, interest groups, and federal, state, and local agencies. Scoping comments were generally related to rock climbing (e.g., route development, route removal, bolting procedures), wildlife, grazing, trails, restrooms, parking, and dispersed camping.

The Forest Service received comments from the following organizations, federal, state, and local agencies during the development of this EA.

- Federal, State, and Local Agencies: Bureau of Land Management; Wyoming Office of Outdoor Recreation; Wyoming Department of Agriculture; Washakie County Conservation District; Wyoming Department of Transportation; Wyoming Game and Fish Department
- Other Agencies and Organizations: Washakie County Visitor's Council; Bighorn Climbers' Coalition; Tensleep Recreation District; Access Fund; Central Wyoming Climbers Alliance; Council for the Bighorn Range; Western Montana Climbers Coalition

Tribal Consultation and Coordination

The project area is situated within the ancestral lands to multiple tribes across the region. Federal law, regulation, and policy require government-to-government consultation between the Forest Service and federally recognized American Indian tribes. Additionally, the Forest Service and tribes share a common interest in maintaining the health of the forests, which can be explored through consultation and partnership development. As a result, the Bighorn National Forest met with the Business Councils of the Northern Cheyenne Tribe and the Tribes of the Wind River Reservation, and additional project coordination was done with Tribal Historic Preservation Officers (THPOs) and tribal members to gain perspectives into the prehistory of the area. Because all the lands in the Tensleep Canyon project area are ancestral to American Indian tribes, it is in the best interest of the Forest Service to utilize tribal knowledge and resources to restore and maintain a healthy forest ecosystem.

The Forest Service initiated government-to-government tribal consultation in August 2023, inviting the following tribes to consult on this project:

- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation

- Cheyenne River Sioux
- Confederated Salish and Kootenai Tribes of the Flathead Reservation
- Crow Nation
- Eastern Shoshone Tribe of the Wind River Reservation
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Kiowa Indian Tribe of Oklahoma
- Three Affiliated Tribes – Mandan, Hidatsa and Arikara Nation
- Northern Arapaho Tribe of the Wind River Reservation
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation
- Oglala Sioux Tribe
- Rosebud Sioux Tribe
- Standing Rock Sioux Tribe

In late 2023, the Bighorn National Forest held government-to-government information sharing meetings between Forest/District staff (district ranger, forest tribal relations specialist, and district archeologist) and THPOs from the Crow, Northern Arapaho, Northern Cheyenne, and Eastern Shoshone tribes. The purpose of these meetings was to discuss the development of the climbing management plan, share the results of completed cultural resource surveys to date, invite review of project documents and maps, and allow a forum for open discussion.

Additionally, in October 2024, the consulting tribes were invited to a two-day, in-person tribal coordination meeting with the Rocky Mountain Deputy Regional Forester and Bighorn National Forest Supervisor. Representatives from eight tribes (Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Cheyenne River Sioux Confederated, Fort Belknap Indian Community of the Fort Belknap Reservation of Montana, Northern Arapaho Tribe of the Wind River Reservation, Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Oglala Sioux Tribe, Rosebud Sioux Tribe, and Standing Rock Sioux Tribe) attended. At the meeting, the Forest Service provided project updates, invited and listened to tribal feedback, and led a site visit to Tensleep Canyon. During the meeting, some tribal representatives recounted oral histories of the project area, some expressed concerns with the number of climbing routes in the canyon, and participants also shared ideas for project implementation including use of a permit system, cultural resource training for climbers, and conducting traditional cultural surveys with tribal participation.

As a result of scoping and tribal coordination, the responsible official modified the Proposed Action, as detailed in the “Alternatives Considered but Eliminated from Detailed Study” section below (p. 9).

Issue Development

Based on scoping comments and ongoing tribal consultation, the responsible official and interdisciplinary team developed a comprehensive list of issues of concern. The following issues are addressed in subsections of the Affected Environment and Environmental Impacts section:

- Effects on soil and water resources
 - How would construction of the parking lot, vault toilets, and trails affect soil resources and sedimentation?
 - How would construction of the vault toilets affect water quality?
- Effects on wildlife species
 - How would new route development, rock climbing, and associated activities affect wildlife special status species and their habitats?

- Effects on botanical species
 - How would climbing and associated habitat disturbance affect special status plant species and their habitats?
 - How would increased human presence and surface disturbing activities affect the introduction and spread of invasive species?
 - How would the creation of the trail network affect riparian and aspen communities?
- Effects on recreation
 - How would implementation of the climbing management plan impact climbing activities?
 - How would the creation of new trails affect the Forest Service's ability to maintain the trail network?
 - How would route development, creation of the trail network, and dispersed camping prohibitions affect adjacent recreation areas?
 - How would the removal of bolts affect the rock walls?
- Effects on scenic quality
 - How would construction of the parking area affect scenic quality from the scenic byway?
 - How would new route development affect the scenic quality of canyon walls?
- Effects on transportation and safety
 - How would the creation of a designated parking area affect highway safety?
- Effects on tribal resources
 - How would new route development affect sacred rocks within Tensleep Canyon?
- Effects on cultural resources
 - How would the increased human presence and surface disturbing activities affect cultural resources?

Alternatives

The Forest Service evaluated two alternatives, the No Action and the Proposed Action, in compliance with NEPA regulations at 36 CFR § 220.7(b)(2). The responsible official changed the Proposed Action after the scoping period based on input from tribes and public comments.

Alternative 1: No Action

Under the No Action alternative, the Bighorn National Forest would not implement the Tensleep Canyon Climbing Management Plan, or any site-specific activities described in the proposed action. Climbing use in the project area, including Leigh Creek RNA, would continue as it currently exists, and no changes would occur to restroom infrastructure, NFS trails, climbing staging areas, or signage. Route development restrictions per existing Forest direction would remain in place throughout the project area. Dispersed camping along Road 18 would still occur, and where it is within 100 feet of Tensleep Creek it would remain out of compliance with forest plan Standard Soil, Water, Riparian, and Wetland 1 (USDA 2005).

Alternative 2: Proposed Action

The Forest Service proposes implementing a variety of management actions to manage rock climbing and associated activities in the project area (**Figure 3**). The Proposed Action includes the following components:

- Add up to 16 miles of trails to the NFS trail network, including 14.8 miles of existing user-created trails and 0.8 mile of rerouted trail. Remove and re-naturalize up to 2.2 miles of closed and rerouted user-created trails.
- Prohibit dispersed camping along 1.5 miles of Road 18. Remove and rehabilitate existing dispersed camping sites within 100 feet of streams or lakes within the project area.
- Install vault toilets at up to four locations, including trash bins and pet waste bag stations.
- Design and construct a parking area to accommodate up to 50 parking spaces (approximately 1.6 acres) and up to 0.5 mile of trail to connect the parking lot to the National Forest System trail network.
- Install boot scrapers and educational signage at parking lot trailhead with information related to rock climbing best practices; cultural resource history and protection; sensitive wildlife and botanical species; and human and pet waste management.
- Replace up to 5,000 square feet of existing user-created climbing staging areas with hardened staging areas, such as retaining walls, drainage structures, and staircases at the base of cliffs.
- Close Leigh Creek RNA to sport climbing and remove all 25 established climbing routes within the RNA.
- Implement a Forest Service review and approval process for development of proposed new climbing routes and areas.
- Rock climbing and route development would be managed with the following conditions:
 - Allow replacement of existing fixed anchors and fixed equipment.
 - Allow route development only where National Historic Preservation Act (NHPA) Section 106 compliance is complete.
 - Allow route development only where rock climbing would not negatively impact wildlife and botany sensitive species.
 - Allow route development only where rock climbing would not negatively impact traditional cultural use areas determined during additional consultation.
 - Remove existing routes where surveys show they are negatively impacting cultural and natural resources.
 - Prohibit route development that removes rock from areas except where the rock in its natural position poses a risk to the climbing party or a future climbing party.
 - Prohibit gluing, attaching artificial holds, or using mechanical equipment to create holds where a natural hold did not exist.
- Implement range improvements including relocating stock tank (504161) away from user-created trails on the North Canyon allotment and replacing a section of electric fence (502126 segments A, B, & C) with permanent wildlife friendly fence in WYDOT right-of-way on the Dry Tensleep allotment.

Design features, listed in **Appendix A: Design Features**, are part of the Proposed Action and have been designed to avoid or minimize environmental effects of project activities. Additionally, **Appendix B: Implementation Guide**, describes the details of implementation including methods and timing for both site-specific management actions (e.g., access trails, staging areas, vault toilets, range improvements) and management actions that require additional survey and/or design before implementation can begin (e.g., parking lot, route development).

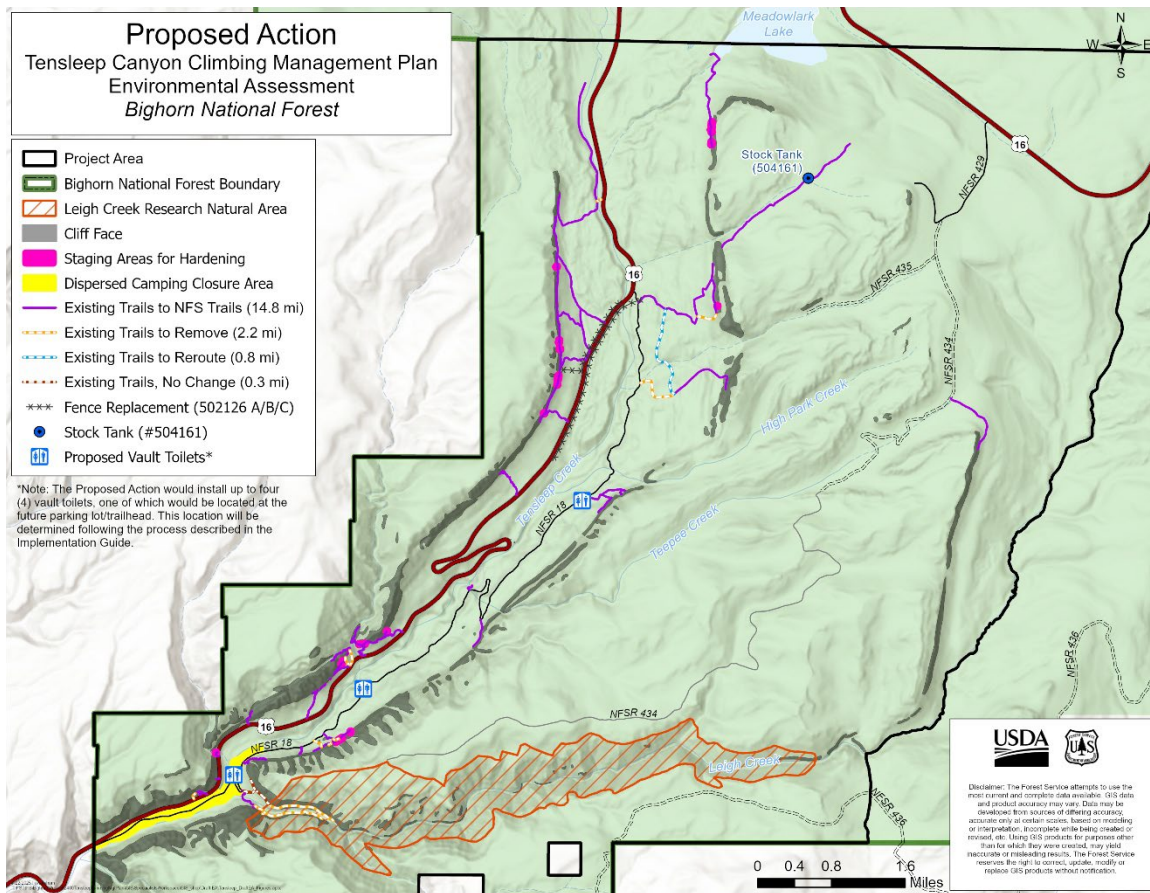


Figure 3. Proposed Action management actions

Alternatives Considered but Eliminated from Detailed Study

Original Proposed Action, As Scoped

The original proposed action proposed to close Leigh Creek RNA to climbing, except at the Godfather Boulder and Chem Trails Wall climbing areas which would remain open. However, since the 2023 scoping period, the Forest Service completed documentation that officially designates Leigh Creek RNA, as it was previously a recommended RNA in the forest plan. According to the establishment record, “The primary objective of the Leigh Creek RNA is to maintain and preserve the natural plant associations and ecological processes for which Leigh Creek RNA was established” (USDA 2025). The project’s purpose and need was updated to incorporate this objective. Based on discussion among the interdisciplinary team, continued sport climbing would have negative resource impacts within Leigh Creek RNA and would not meet the project’s purpose and need. Therefore, the Forest Service revised the Proposed Action to close all of Leigh Creek RNA to climbing and remove all existing routes.

The original proposed action also included a 50-vehicle parking lot off U.S. Highway 16. However, during tribal coordination meetings the Forest Service learned that several tribes were concerned with the proposed location by the Mondo Beyondo wall. Therefore, the Forest Service removed the site-specific location and developed design features and implementation processes to facilitate future site location, design, and construction of the parking lot. Management actions

related to route removal in the vicinity of previously manufactured routes were also removed from the Proposed Action. Lastly, the Forest Service revised the proposed action to include specific rangeland improvements based on scoping comments received from permittees with allotments in the project area.

Designated Dispersed Camping

The Forest Service received comments that proposed designated dispersed camping along Road 18. After discussion with the interdisciplinary team, the responsible official determined that including designated dispersed camping in the project was outside the scope. While managing the amount of people camping is important to reducing resource damage, the responsible official decided the creation of designated dispersed camping sites along Road 18 would best be analyzed under a separate project.

Tensleep Nowood Trailbrakers Proposal

The Tensleep Nowood Trailbrakers proposed a below-grade crossing of U.S. Highway 16 near the northern Road 18 intersection. This group also requested permission to mark and maintain an existing route from Meadowlark Lake Dam and the upper end of Road 18. The responsible official determined that these actions are outside the scope of the project but could be pursued as a separate project at a later date.

Route Development Permit System

Several commentors requested an official permitting system for bolting and route development, such as an online form with associated fees. The responsible official carefully considered this idea; however, there is currently no framework or authority for the Forest Service to implement a permitting and fee system specifically for climbing route development.

Unrestricted Route Development

Some commentors expressed that route development should be allowed throughout the entire project area without any restrictions, citing many different reasons. Some stated that it would address overcrowding at certain climbing areas, others stated that limiting development would hinder the creation of safer routes and opportunities for climbers of all skill levels. Unrestricted route development, however, would potentially have significant impacts to natural and cultural resources, and therefore would not meet the project's purpose and need.

Affected Environment and Environmental Impacts

The Forest Service analyzed the potential environmental effects from the two alternatives (No Action and Proposed Action) on natural resources and the human environment in compliance with NEPA regulations at 36 CFR § 220.7(b)(3). In order to determine whether the Proposed Action would result in a significant effect on the environment, the analyses assume all management actions are implemented in order to provide an estimate of maximum effects.

This section summarizes the effects analysis results and incorporates by reference the resource-specific analyses available in the project record. Individual sections are organized as follows: issue statement(s) (in *italics*), affected environment (common to both alternatives), effects associated with the No Action alternative, and effects associated with the Proposed Action alternative. Design features correspond with the table in **Appendix A** and are identified in this section in bold italics (e.g., ***Range 1***).

Effects on soil and water resources

Issues: How would construction of the parking lot, vault toilets, and trails affect soil resources and sedimentation? How would construction of the vault toilets affect water quality?

The project area includes 28 soil map unit types. The Cloud Peak-Starley-Rock outcrop map unit dominates the greater Tensleep Canyon area. Soils represented in the project area include both moderately deep and shallow, well-drained soils that formed in material derived from limestone on mountain slopes and ridges. Five types of wetlands occur within the project area as identified from the National Wetlands Inventory (NWI). The identified wetland types are freshwater emergent, freshwater forested/shrub, freshwater pond, lake, and riverine wetlands. The project area (26,544 acres total) consists of approximately 924 acres of wetland environments (3%) and approximately 1,330 acres of riparian vegetation (5%).

No Action

Under the No Action alternative, no NFS trails would be established, and no existing user-created trails would be rerouted, removed, or maintained. Additionally, no parking lot or vault toilets would be constructed. This alternative would likely result in continued erosion and sediment delivery associated with ongoing, and potentially increased, use of user-created trails and parking in undesignated areas. Without the establishment of vault toilets, water quality in the project area will be at risk to the presence, and potential increase, of uncontained human waste.

Proposed Action

The Proposed Action would add up to approximately 16 miles of trails to the NFS trail network in the project area, including 14.8 miles of existing user-created trails and up to 0.5 mile of new trail to connect to the future parking lot. It would also reroute or remove and rehabilitate approximately 3 miles of poorly located user-created trails. Trail construction activities would temporarily disturb approximately 18 total miles of soil, including potential soil loss, soil compaction, and loss of vegetative cover. Soil compaction could result in less infiltration and increased surface runoff; continuous disturbed areas that reduce infiltration serve as pathways for sediment to enter streams from adjacent source zones during runoff events. A short-term increase in sediment could occur in areas next to the trail construction locations due to removal of vegetation.

Design features would mitigate potential short-term effects of trail construction on soils. To the maximum extent possible, trails would be constructed on existing user-created trails (**Rec 1**), which would reduce the amount of vegetative cover needed to be removed during construction. Additionally, erosion control measures would be required (**Hydro 1**) and trails would be kept out of wetlands where possible (**Hydro 2**). User-created trails that are converted to NFS trails would be constructed in accordance with policies in Forest Service Manual (FSM) 2350 and Forest Service Handbook (FSH) 2309.18, including drainage features and trail hardening to reduce muddiness occurring from poorly drained soils where pooling may occur. Overall, the removal and rerouting of trails on steep slopes would reduce soil erosion, and ongoing trail maintenance, which is required every 9 years for Class 1 trails, would also address potential long-term effects of trails on soil resources.

The Proposed Action would construct up to four (4) vault toilets in the project area. Establishment of vault toilets would likely decrease the amount of uncontained human waste in the project area and thus reduce contamination and pollutants from entering the water system and protect water

quality. The construction of vault toilets would cause a short-term increase in soil erosion; however, the disturbance area would be limited to less than 0.1 acre at each bathroom site. Design features would further mitigate potential effects. Specifically, vault toilets would be designed and constructed in close proximity to and upslope of existing roads to reduce ground disturbance and erosion and to allow runoff to utilize existing road drainage features (*Hydro 3*). Given the distance of the proposed toilet locations from the mainstem of perennial streams, it is unlikely that the proposed toilets would contribute to substantial sediment delivery to these water systems.

Lastly, the Proposed Action would construct a parking lot with up to 50 parking spaces. The parking lot would be approximately 2 acres and though the exact location will be determined after survey and design, it would be located in an area with soil types that have low soil erosion potential and no major limitations to ground-disturbing activities. Parking lot construction would temporarily cause sediment movement and soil compaction, but these short-term effects would be mitigated by design features which require installation of erosion control measures (*Hydro 1*).

The intensity of effects to soils is mainly dependent on the physical properties of the soils, but the timing, frequency, and length of ground disturbing activities also contribute to the level of disturbance. Any potential effects to soil resources would be minimized by using applicable design features, complying with guidelines in the Watershed Conservation Practices Handbook (FSH 2509.25, Chapter 10), and implementing applicable measures from the National Best Management Practices for Water Quality Management on National Forest System Lands (USDA 2012).

Effects on wildlife species

Issues: How would future route development, rock climbing, and associated activities affect wildlife special status species and their habitats?

The Bighorn National Forest zone wildlife biologist analyzed 30 Regional Forester Sensitive Species (RFSS), 5 Management Indicator Species (MIS)/Focal Species, 7 Species of Local Concern (SOLC), and 10 Demand Species identified in the forest plan. In addition, the wildlife biologist analyzed impacts to migratory birds in compliance with Migratory Bird Treaty Act and Executive Order 13186, and the Bald and Golden Eagle Protection Act. Lastly, there are two species proposed for listing under the Endangered Species Act that are suspected to occur in the project area: Suckley's cuckoo bumble bee (*Bombus suckleyi*) and monarch butterfly (*Danaus plexippus*); no critical habitat was identified.

The wildlife biologist conducted analyses to determine if these special status species are known to occur in the project area, if their habitat is present in the project area, and if they would be impacted by the proposed project. This section summarizes the wildlife analysis results for a subset of species, including bats; raptors and migratory birds; and deer, elk, and moose. Detailed results of the analysis for all special status species are available in the project record.

Bat Species

As many as twelve different bat species are suspected to occur in the project area based on recent surveys, five of which are confirmed to be present and have special status on the Forest including: fringed myotis (*Myotis thysanodes*; RFSS), hoary bat (*Lasiurus cinereus*; RFSS), spotted bat (*Euderma maculatum*; RFSS), Townsend's big-eared bat (*Corynorhinus townsendii*; RFSS), and long-eared myotis (*Myotis evotis*; SOLC). Fringed myotis bats, long-eared myotis bats, spotted bats, and Townsend's big-eared bats all use cliff, cave, and rock outcrop habitats for roost

structures. In Tensleep Canyon, there are approximately 835 acres of mapped cliff habitat, of which approximately 74 acres (9%) have established climbing routes. Hoary bats use habitat along riparian areas and other forest edges throughout the project area. Roosting habitat for this species in the project area was estimated from forested habitat; this habitat comprises 61% of the project area.

Migratory Birds and Raptors

Habitat in the project area supports a diversity of migratory bird species (canyon wren, cliff swallow, white-throated swift, and rock wren) and raptors (golden eagle, prairie falcon, peregrine falcon, American goshawk, red-tailed hawk, and great horned owl). American goshawk and great horned owls are present in the project area based on incidental observations. Historic nests of golden eagles, prairie falcons and peregrine falcons have been documented in the project area by Wyoming Game and Fish Department (WGFD) and have been monitored by the Forest Service and volunteers since 2021. As a result of monitoring surveys to date, two active peregrine territories and associated nests have been located, one of which has been confirmed to successfully fledge young each year since 2021 with voluntary climbing closures in place. Golden eagles have nested with fledgling success observed one year since 2021. The location of their nests currently has low climbing route density and climbing use.

Deer, Elk, and Moose

Approximately 565 acres of the project area is designated as Management Area 5.41 (Deer and Elk Winter Range) in the forest plan which “are managed to provide adequate amounts of quality forage, cover, and solitude for deer, elk, and other species” (USDA 2005). Road 18 is seasonally closed to motorized traffic from November 16 through June 15 to protect winter range and parturition habitat as mapped by WGFD. For Rocky Mountain elk (*Cervus canadensis*; MIS), most of the west side of Highway 16 is crucial winter range for the Medicine Lodge herd, which is 2.9% below herd size objectives (Stephens 2022a). The south half of the project area provides winter and year-round range, as well as parturition habitat. For mule deer (*Odocoileus hemionus*; Demand species), the project area provides winter range, crucial winter range, spring/summer/fall, and yearlong range for the Paint Rock and Southwest Bighorns herds. The Paint Rock herd uses the west part of the project area and is 16.8% below objective herd size (Stephens 2022b). The Southwest Bighorns herd uses the east part of the project area and is 58.8% below objective herd size (Kroger 2022). Lastly, it is suspected that a small number of moose (*Alces alces shirasi*; Demand species) that summer north of the project area use Tensleep Canyon as winter range.

No Action

Under the No Action alternative, recreation infrastructure (e.g., trails, staging areas, vault toilets, parking lot) would not be constructed and rock climbing would continue in areas where it already exists, including Leigh Creek RNA. Existing climbing and camping activities currently affect up to 23% of deer and elk winter range mapped by WGFD. Effects include habitat avoidance by deer and elk in combination with motorized use of roads, over-snow recreation, dispersed camping, grazing and other vegetation management, and administrative and recreational use. Additionally, some areas of moose winter habitat will continue to be affected by existing climbing access trails and staging areas. The seasonal closure of Road 18 to motorized traffic would continue under the No Action alternative, which would reduce motorized disturbance of winter range and parturition habitat for these species.

Climbing currently affects approximately 22% of cliff habitat in the project area, which assumes a 50-meter avoidance area buffer of existing access trails and climbing walls. Unintentional take of cliff-dwelling migratory birds, raptors, and bat species would continue to occur as a result of unmanaged climbing activities and associated human presence. However, undisturbed cliff habitat outside of existing climbing areas would likely protect potential raptor nest and bat roost sites. Voluntary seasonal closures for climbing in the vicinity of active raptor nests would continue, which may also protect bat roosts for part of the year. For hoary bats, approximately 1% of habitat would be affected, either by disturbance or avoidance, due to localized climbing activities. Therefore, the effect determination for the four sensitive bat species (fringed myotis bats, spotted bats, Townsend's big-eared bats, and hoary bats) is "*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*" under the No Action alternative.

Proposed Action

Under the Proposed Action, recreation infrastructure (i.e., trails, staging areas, vault toilets, parking lot) would be constructed, Leigh Creek RNA would be closed to all climbing, and route development would be allowed once proposed areas are surveyed and reviewed for site-specific impacts (see **Appendix B: Implementation Guide**). Effects to wildlife as a result of climbing access trail construction and staging area hardening would be similar to the No Action alternative, as these activities are already occurring where existing use is already happening. The proposed parking lot would impact approximately 2 acres of sagebrush/shrubland habitat, though the exact location will be determined after survey and design.

The Proposed Action would affect up to 27% of WGFD-mapped deer and elk winter range. The seasonal closure of Road 18 mitigates motorized disturbance in a portion of that habitat, which also includes elk calving area, but all winter range in the project area is subject to non-motorized disturbance. For deer and elk, the proportion of habitat affected by the project at the herd unit scale would be low; however, considering that these herds are below size objectives, the Proposed Action would not contribute to the forest plan strategy to improve big game habitat value to support population objectives. However, design features would reduce short-term effects by restricting construction during seasonal wildlife closures (*Wildlife 1*), and reduce long-term effects by limiting new trails and staging areas in winter range and parturition habitat (*Wildlife 2*) and requiring that trails added to the NFS trail network utilize existing user-created trails to the greatest extent possible (*Rec 1*).

Unrestricted route development would affect approximately 88% of cliff habitat in the project area. This is a conservative estimate that assumes a 50-meter buffer from adopted NFS trails and maximum route development of cliffs in Tensleep Canyon. Expanded climbing routes and associated human presence would disturb cliff-dwelling migratory birds, raptors, and bat species in these areas. However, design features would restrict route development during seasonal wildlife closures (*Wildlife 1*), require site-specific surveys before approving areas for route development (*Wildlife 3*), and limit route development where raptor nests or bat roosts are found (*Wildlife 3*). Voluntary seasonal closures for climbing in the vicinity of active raptor nests would also continue under the Proposed Action. Additionally, the removal of sport climbing from Leigh Creek RNA would restore cliff-nesting bird habitat and bat roost habitat and would have beneficial effects in the long term.

For sensitive bat species, the effect determination for Townsend's big-eared and hoary bats is "*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” under the Proposed Action. For fringed myotis and spotted bats, the effects determination is “Will impact individuals or habitat with a consequence that the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species.” However, as part of the route development guidelines outlined in the Proposed Action, route development would be prohibited where it would cause negative impacts to wildlife sensitive species. This would be determined through the review process described in **Appendix B: Implementation Guide**.

Effects on botanical species

Issues: How would climbing and associated habitat disturbance affect special status plant species and their habitats? How would increased human presence and surface disturbing activities affect the introduction and spread of invasive species? How would the creation of the trail network affect riparian and aspen communities?

The Bighorn National Forest botanist analyzed 22 special status botanical species – including Regional Forester Sensitive Species (RFSS), Species of Local Concern (SOLC), and State Species of Concern (SOC) – to determine if they are known to occur in the project area, if their habitat is present in the project area, and if they would be impacted by the proposed project. This section summarizes the botany analysis results for a subset of special status plant species to which all three conditions apply. Additionally, there are no known endangered, threatened, proposed, or candidate plant species which occur in the project area, and no critical habitat was identified.

Meadow and Shrubland Species

Cary’s beardtongue (*Penstemon caryi*, RFSS)

Soft aster (*Symphyotrichum molle*, SOLC)

White larchleaf beard-tongue (*Penstemon laricifolius ssp. exilifolius*, SOLC)

Sagebrush habitat is found in 33% of the project area and is the next most heavily impacted habitat type within the project area after cliff walls. Grass/grass-like habitat, rocky soils and shrublands comprise approximately 4% of the project area. Populations of Cary’s beardtongue and white larchleaf beard-tongue are known to occur in the project area along NFS Road 436 (Sand Draw Road) and populations of soft aster are known to occur in the project area in eight locations including along Road 18.

Alpine and Cliff Species

Musk root (*Adoxa moschatellina*, SOLC)

Watson’s prickly phlox (*Linanthus watsonii*, SOLC)

Brightgreen spleenwort fern (*Asplenium trichomanes-ramosum*, State species of concern)

Cliff walls only represent approximately 3% of the project area but, as a resource, see recurring and consistent use and are impacted daily by recreation and climbing activity when weather permits. Approximately 74 acres of the 835 available acres of limestone/dolomite cliff habitat in the project area are in use by established climbing routes. Known locations of musk root, Watson’s prickly phlox, and brightgreen spleenwort fern are mostly within and bordering the Leigh Creek RNA but are suspected throughout the project area. An additional site of Watson’s prickly phlox is in Tensleep Canyon near Blood, Sweat & Beers climbing area.

No Action

Under the No Action alternative, native vegetation in the project area would continue to be impacted by the unmanaged user-created trail system, dispersed camping, and human and pet waste. Vegetation would continue to be trampled and denuded in dispersed camping locations, parking areas, climbing areas, and braided (“spider-webbing”) user-created trails, and erosion would continue to occur without proper vegetation cover. Invasive species would continue to invade these disturbed areas and could out-compete native vegetation.

For all special status plant species described above, the determination of effect for the No Action alternative is “*May adversely impact individuals, but not likely to result in a loss of viability.*” For meadow and shrubland species, Cary’s beardtongue and white larchleaf beard-tongue populations are limited to areas along NFS road 436 and are not directly affected by current parking areas, user-created trails, climbing routes, or camping activities. Four dispersed campsites along Road 18 are within soft aster known population locations. Individuals may be trampled by vehicles and recreators, and habitat will remain degraded. The alpine and cliff plant species (musk root, Watson’s prickly phlox, and brightgreen spleenwort fern) are the SOLC most directly impacted in the project area because of their known locations in Leigh Creek RNA. The continued unmanaged use and expansion of user-created trails could affect the individuals and populations adjacent to climbing access trails and staging areas through trampling and habitat degradation. Rare plant habitat in Leigh Creek RNA would continue to be heavily impacted by recreation, and impacts to these species would threaten the values for which the Leigh Creek RNA was established.

Proposed Action

The Proposed Action would concentrate use and travel on NFS trails which would reduce erosion and braiding of user-created trails, reduce the area potentially exposed to invasive species, and subsequently reduce overall impacts to habitat for sagebrush/shrubland species. Additionally, prohibition of dispersed camping along 1.5 miles of Road 18 would reduce impacts to known populations of soft aster and its habitat. Construction of new recreation infrastructure could temporarily expose areas to invasive species, but impacts would be limited by design features. Specifically, use of treated, weed-free fill would be required during construction of NFS trails, staging areas, and other facilities (e.g., parking lot, vault toilets) (**Range 5**). For removal and rehabilitation of existing user-created trails and staging areas, use of native and weed-free seed mixes for revegetation would be required (**Range 2**). The Proposed Action would also install boot scrapers at the parking lot trailhead to limit the spread of invasive species by climbers and other recreational users.

New route development has the potential to impact special status plant species, particularly Watson’s prickly phlox because species abundance at the Forest level is not known. However, potential impacts to plant species would be mitigated by design features which require botanical surveys before development of new routes or climbing areas (**Botany 2**). Additional design features ensure that botanists are consulted before ground-disturbing work takes place (**Botany 1**) and that buffers are maintained around special status plant species during construction of trails and staging areas (**Botany 4**). New route development would also open previously undisturbed habitat to resource impacts, which could lead to the introduction of invasive species into new areas. Invasive species will continue to be monitored and managed in compliance with forest plan requirements. Riparian and aspen plant communities would be protected through the implementation of design features which would require erosion control measures (**Hydro 1**) and

avoid trail construction in known aspen communities (*Timber 1*) to minimize ecological disturbance.

For most of the species (Cary's beardtongue, soft aster, white larchleaf beard-tongue, musk root, and brightgreen spleenwort fern), the determination of effect under the Proposed Action is "*May adversely impact individuals, but not likely to result in a loss of viability nor cause a trend toward listing.*" The exception is Watson's prickly phlox, for which the determination of effect is "*Will impact individuals or habitat with a consequence that the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species.*" However, as part of the route development guidelines outlined in the Proposed Action, route development would be prohibited where it would cause negative impacts to botany sensitive species. This would be determined through the review process described in **Appendix B: Implementation Guide**.

Effects to recreation

Issues: How would implementation of the climbing management plan affect climbing activities? How would the creation of new trails affect the Forest Service's ability to maintain the trail network? How would new route development, creation of the trail network, and dispersed camping prohibitions affect adjacent recreation areas? How would the removal of bolts affect the rock walls?

Tensleep Canyon lies in the southwest corner of the Bighorn National Forest and is administered by Powder River Ranger District. Tourism and recreation in the project area has increased substantially since the COVID-19 pandemic. Visitation and recreational use in Tensleep Canyon are highest between May and October, with lower levels occurring the remainder of the year.

Approximately 835 acres of Tensleep Canyon are dolomite rock walls identified as cliff habitat. Of these cliffs, approximately 74 acres (9 percent) have already been developed with climbing routes and associated staging areas. There are currently 144 named climbing walls each containing between one and 75 individual climbing routes for a total of about 1,350 existing routes (see **Appendix D: Climbing Wall Inventory**). The majority of routes are sport climbing routes, meaning they rely on fixed gear installed in the rock, all of which were developed prior to 2019. Climbing walls are accessed via user-created trails, which lead from the parking pull-offs along U.S. Highway 16 and Road 18 to the climbing areas and also connect between different climbing areas. User-created trails are in variable condition and many have additional spidering or braiding.

The area surrounding Tensleep Canyon offers a mix of developed and undeveloped camping options. Leigh Creek Campground is the only developed campground in the project area. It has 10 campsites and a vault toilet and is open seasonally from Memorial Day through Labor Day. Additional campgrounds are located along U.S. Highway 16 just outside of the project area: Gallatin Canyon (private), Boulder Park, Willow Park, Lake View campgrounds to the north, and Ten Sleep Rock Ranch and Hideyhole RV campgrounds (both private) to the south. Dispersed camping on Road 18 is allowed within 300 feet of open roads (unless otherwise indicated by forest order) from mid-June through mid-November and is closed for the remainder of the year for elk calving (USDA 2023). Surveys indicate that several dispersed campsites on Road 18 are currently within 100 feet of Tensleep Creek. In recent years, porta-potties have been seasonally provided by the Bighorn Climbers Coalition at two locations along Road 18 to reduce accumulation of human waste. Otherwise, the vault toilet at Leigh Creek Campground is the only permanent bathroom in the project area.

No Action

The No Action alternative maintains the status quo for climbing and camping in Tensleep Canyon. All existing climbing routes in Leigh Creek RNA would remain open, and development of new routes would remain prohibited per existing Forest direction. Without additional route development, existing climbing areas may become more crowded as climbing popularity continues to increase in Tensleep Canyon. Additionally, the existing user-created trails and staging areas would remain without routine maintenance and may be subject to formal closure for resource protection. Any maintenance conducted on user-created trails and staging areas would continue to require independent approval through the NEPA process.

Proposed Action

Management actions under the Proposed Action would have primarily beneficial effects to recreation. The Proposed Action would add up to approximately 16 miles of trails to the NFS trail network in the project area, including 14.8 miles of existing user-created trails and up to 0.5 mile of new trail to connect to the future parking lot, which is a 2.5% increase of trails in the Bighorn National Forest. All trails considered for addition to the NFS trail network would be considered Class 1 trails, be designed for hiker and pedestrian use, and receive routine maintenance. Additionally, about 3 miles of poorly located existing user-created trails would be rerouted or removed and rehabilitated. These proposed improvements to the trail network would provide safe and sustainable access to climbing activities, which would improve the user experience for rock climbers. Construction of up to four vault toilets and a parking lot would also improve the user experience for rock climbers, in addition to other recreational users in Tensleep Canyon. All construction activities may cause temporary disruptions to recreation but would have beneficial long-term effects.

Under the Proposed Action, dispersed camping would be prohibited along 1.5 miles of Road 18 (from the U.S. Highway 16 junction to the east), and dispersed campsites within 100 feet of Tensleep Creek would be removed and rehabilitated. Road 18 is approximately 8 miles long, so the Proposed Action would reduce camping opportunities by about 19%. There are 26 dispersed campsites along the 6.5 miles of Road 18 that would remain open to dispersed camping, four of which (15%) are within 100 feet of Tensleep Creek and would therefore be removed under the Proposed Action. Together, these actions would reduce the number of available dispersed campsites that currently exist along Road 18. However, new sites would likely be established, which is allowed anywhere within 300 feet along Road 18, as long as the site is not within 100 feet of Tensleep Creek. Therefore, long-term negative impacts to camping are not expected.

Under the Proposed Action, existing climbing would continue in Tensleep Canyon at all climbing areas except for Leigh Creek RNA, where existing routes would be removed and future route development would be prohibited. A total of 25 climbing routes on the following walls would be removed: Chem Trails (2 routes), Godfather Boulder (5 routes), Haunted Wall (8 routes), and Twomey Town (10 routes). Thunder Butress, which is on the boundary of Leigh Creek RNA, would remain open for climbing. This would have an approximate 2% decrease in the number of climbing routes currently available in the project area. However, allowing for additional route development elsewhere in the project area would make up for this loss.

In general, the project area would be open to new route development in accordance with the guidelines outlined in the Proposed Action and design features described in **Appendix A: Design Features**. Route development would follow a review process including site-specific surveys and review by Forest Service staff in order to protect wildlife, botanical, and cultural resources. This

process, detailed in **Appendix B: Implementation Guide**, would allow for the sustainable expansion of climbing opportunities in Tensleep Canyon. This could allow users to disperse throughout the project area and reduce crowding at popular climbing areas. Lifting climbing route development restrictions within the project area could also help decrease illegal route development and ensure that future route development is done without impacting cultural and natural resources.

Lastly, the installations and improvements associated with the Proposed Action would improve recreational opportunities in the project area, which could increase the number of users. The addition of new climbing routes and areas as a result of route development could also cause a change in use patterns of adjacent recreational areas. Forest Service climbing rangers will continue to help the Bureau of Land Management (BLM) monitor, inventory existing climbing routes, and use patterns outside of Bighorn National Forest land. Climbing rangers will communicate any issues and concerns to the BLM management as outlined in Forest Service Agreement No. 20-IA-11020200-004.

Effects on scenic quality

Issues: How would construction of the parking area affect scenic quality from the scenic byway? How would new route development affect the scenic quality of canyon walls?

The 45 miles of U.S. Highway 16 from Ten Sleep to Buffalo, Wyoming is designated as the Cloud Peak Skyway scenic byway because of scenic vistas into the Cloud Peak Wilderness, and it is a popular route for tourists heading west to Yellowstone National Park or east to the Black Hills National Forest. Tensleep Canyon surrounds a 5-mile stretch of the scenic byway and is characterized by limestone and dolomite cliffs. Pullouts along the highway allow for vistas of the canyon walls.

There are eight forest plan management areas in the project area (**Figure 2**). Most of the existing climbing walls are located in MA 2.2-Research Natural Area or MA 4.2-Scenery, which are managed for a scenic integrity objective of 'high'. For areas with a high scenic integrity objective, the valued landscape character appears intact and deviations may be present, but must repeat form, line, color, texture, and pattern common to the landscape. Most climbing walls are in the background where bolts, chalk, and concentrated groups of climbers are subordinate to the landscape. However, some popular climbing areas, such as Home Alone wall, are within the immediate viewing foreground of the scenic byway. The remaining six management areas (MA 3.31, 4.3, 5.12, 5.13, 5.41, 8.22) all have guidelines in the forest plan to manage for a scenic integrity objective of 'moderate' or below. For areas with a moderate scenic integrity objective, the valued landscape character appears slightly altered and noticeable deviations must remain visually subordinate to the landscape character being viewed.

No Action

Under the No Action alternative, the Forest Service would not construct a parking lot and therefore there would be no changes to the landscape character. There would also be no additional route development and rock climbing would be limited to existing routes. Impacts would be changes to the scenic quality of the canyon walls by presence of climbers, residual chalk on canyon walls and replacement of bolts. Impacts to scenic quality would occur in areas where climbing currently exists, but would not spread out to other areas of Tensleep Canyon.

Proposed Action

The Forest Service proposes to build a parking area in Tensleep Canyon to accommodate up to 50 vehicles. In order to follow forest plan guidance to meet a scenic integrity objective of ‘high’, any changes to landscape should be unobtrusive or subordinate to the valued landscape character and consistent with the desired landscape character. Any developments such as roads, recreation facilities, and rangeland improvements may be evident, but should appear to be in harmony with the natural environment. To accomplish this, design features were developed to screen the parking lot from view from the scenic byway by using naturally occurring and natural appearing construction materials (*Rec 5*). Implementing these design features would ensure the proposed parking lot will conform to the higher standard of scenic integrity objective.

Route development has the potential to affect the scenic quality of canyon walls within the project area either by the direct placement of bolts, residual chalk left on canyon walls, or from the overall increased or consolidated presence of climbers into new areas. For areas managing for an objective of ‘moderate’ or lower, proposed route development will have no overall negative impact to scenery as moderate and lower scenic integrity objectives allow for some deviations from the natural landscape if they are unobtrusive or subordinate to the valued landscape character. Most future route development would be likely to occur in the background of areas viewed by the general public, as most of the easily accessible climbing areas have been previously developed.

In MA 4.2-Scenery, scenery objectives are managed as ‘moderate’ except for focal landscape or scenic overlook where objectives are managed for ‘high’ integrity. These rare instances where the impacts of climbing can be viewed from the scenic byway will be addressed through design features including camouflaging permanently fixed equipment such as bolts and webbing (*Rec 4*). In addition, the Forest Service and partner groups can educate climbers on the use of chalk as well as encourage volunteer groups to participate in residual chalk clean-up projects. In Leigh Creek RNA (MA 2.2), the Proposed Action would remove existing climbing routes and prohibit new route development, which would improve scenic quality in the area by removing landscape alterations.

Effects on transportation and safety

Issues: How would the creation of a designated parking area affect highway safety?

The main roads in the project area include U.S. Highway 16 and Road 18, also known as the “Old Highway.” According to the Bighorn National Forest Motor Vehicle Use Map (MVUM), Road 18 is designated as a road open to all vehicles from June 16 through November 15 and dispersed camping is currently allowed on both sides of the entire road (USDA 2023). Anecdotal accounts suggest the lack of developed parking areas within Tensleep Canyon has negatively affected highway safety along U.S. Highway 16. Currently, Tensleep Canyon visitors’ only option for parking are several small pullouts along U.S. Highway 16. The current lack of signage and shortage of space lead to sudden stops and vehicles pulling back into traffic with little warning.

The Wyoming Department of Transportation (WYDOT) provided usage data for the section of U.S. Highway 16 from mileposts 34 to 44, or the stretch of highway from the point where Road 18 branches off, up to Deer Haven Lodge and NFS Road 27. The most recent annual average daily traffic number for this stretch from 2022 was 750 vehicles per day. This number was roughly the average for this section compared to numbers from 1970 to 2021, which ranged from 630 to 900 vehicles per day. Crash data provided covered the same 10-mile stretch for the years

2018 through 2022. The data reported a total of 34 crashes over this time span. No clear connection could be made between the crashes reported and the lack of designated parking areas. One crash involved a vehicle making a U-turn and hitting a guardrail near a pull-off on the eastbound side of the highway at milepost 36.2, but the other 33 crashes involved wildlife, snow and ice, failure to stay in proper lane or the roadway while negotiating turns, and other causes typical on a mountain highway stretch.

No Action

Under the No Action alternative, no parking lot would be constructed, and climbers and highway travelers would continue to park in roadside pullouts on U.S. Highway 16. Therefore, highway safety in the project area would be unchanged from its current state.

Proposed Action

Under the Proposed Action, the Forest Service would design and construct a parking area with up to 50 spaces and install informational signage along the highway. These improvements would mitigate highway safety issues, as the shortage of parking spaces and sudden movements in and out of traffic would decrease. The exact location of the parking lot is currently unknown, but it would be sited, designed, and permitted in coordination with the WYDOT, as described in **Appendix B: Implementation Guide**.

The Proposed Action would also prohibit dispersed camping along 1.5 miles of Road 18. This would be accomplished by interim forest order, signed by the Forest Supervisor, to temporarily prohibit dispersed camping within the affected area. Informational signage would be installed along Road 18 to notify the public of the closure. A subsequent update to the MVUM would formalize this change and serve as the long-term enforcement mechanism to prevent future dispersed camping in proximity to streams.

Effects on tribes and tribal resources

Issues: How would new route development affect sacred rocks within Tensleep Canyon?

All of the lands within the Tensleep Canyon are ancestral homelands to American Indian tribes. Evidence of the prehistoric use of the area is reflected in the archaeological resources observed within the canyon and demonstrate a high level of traditional use (see “Effects to cultural resources” section below for more details concerning archaeological resources). Additionally, migration stories and oral histories from tribal elders speak to their connection with the Bighorn Mountains since time immemorial (Graetz and Graetz 2000; FlatLip 2024). Several tribes have expressed that they consider all rocks and cliffs within Tensleep Canyon as sacred and of great importance.

Tensleep Canyon is currently managed by the Forest Service, and tribal members use the Bighorn National Forest for traditional resources and ceremonies and to gather medicinal plants for other traditional and cultural purposes. Tribes conduct traditional gatherings and ceremonies throughout the Bighorn National Forest that may or may not occur at the knowledge of the land manager. The Forest Service recognizes the importance of maintaining these traditions to area tribes and accommodating traditional use of Forest Service lands by American Indian tribes provided it complies with existing laws and regulations. In an attempt to reduce the likelihood of conflicts between traditional tribal activities and operations related to climbing in the Tensleep Canyon project area, consultation and coordination is a critical component between the tribes and the

Bighorn National Forest regarding the timing and locations of specific planned activities and operations.

No Action

Under the No Action alternative, rock climbing in Tensleep Canyon would continue and route development would follow existing Forest direction which prohibits route development. Recreational climbing has already impacted the Tensleep Canyon rocks and traditional cultural use areas. Development of sport climbing routes has already damaged the sacred rock by drilling holes and installing metal bolts. In some areas, route “manufacturing” (e.g., chipping, gluing) has permanently altered the sacred rock of Tensleep Canyon. Traditional cultural use areas and cultural resources are at risk to user-created access trails and staging areas because these activities can destroy seed and habitat for native plants and cause soil erosion. Staging areas and user-created trails would still exist, but without improvements. Soil erosion from water channels that develop as a result of trails that are within or adjacent to sites could continue to affect a site’s cultural stratigraphy and displace cultural material.

Proposed Action

According to several tribes, actions involved with route development, such as installing bolts into the rock and accidental chipping or removal of rock, irreversibly damage rocks that are considered sacred. Some tribes have expressed that there are already too many climbing routes in Tensleep Canyon, and therefore any allowance of existing climbing or future route development goes against their wishes for how the canyon should be managed. The Proposed Action attempts to strike a balance between management preferences of the tribes and recreational users (i.e., climbers) by limiting route development to areas that have been reviewed by the Forest Service. This review process is described in **Appendix B: Implementation Guide**. To prevent negative impacts to traditional cultural use areas under the Proposed Action, the Forest Service will invite tribes to conduct traditional cultural surveys prior to implementation to ensure that management actions do not cause irreversible negative impacts (**Cultural 2**). Additionally, the Proposed Action would only allow route development that meets conditions to further reduce potential adverse impacts to sacred rocks, such as prohibiting route development that removes rock from the walls (except where the rock in its natural position poses a risk to climbing parties) or that involves gluing, attaching artificial holds, or using mechanical equipment to create holds where natural holds do not exist. Lastly, as part of the Proposed Action, educational signage would be developed in coordination with tribes and installed at the parking lot trailhead to provide information to climbers and other recreational users about tribal histories and the cultural significance of Tensleep Canyon.

Effects on cultural resources

Issues: How would the increased human presence and surface disturbing activities affect cultural resources?

Previous investigations indicate cultural resources are present in the project area and the potential to find additional historic properties is high. Of the 26,537 acres in the project area, 2,920 acres or 11% of the project area has been inventoried to current standards set forth by the Wyoming State Historic Preservation Office (SHPO) for a Class III intensive inventory. Most recently, the Forest Service contracted a Class III intensive survey of 1,056 acres within the project area. Historic properties located in the project area include rock art panels, lithic scatters, and rock shelters.

Previous cultural resource investigations have identified a total of 100 sites within the 26,537-acre project area. Of these, 72 are prehistoric in origin, 17 are historic, 7 contain both prehistoric and historic components, and 4 are of undetermined age. Eligibility evaluations for the National Register of Historic Places (NRHP) have been completed for the majority of sites: 42 have been recommended as eligible for listing (i.e., considered historic properties), 44 have been determined ineligible, and 14 sites remain unevaluated. Eligible sites 48WA389, 48WA394, and 48WA927 have existing recreation trails running through the site. Sites 48WA2201 and 48WA2488 are close to areas with trails.

No Action

Under the No Action alternative, the Forest Service would not implement the Tensleep Canyon Climbing Management Plan. Climbing route development would remain prohibited under existing Forest direction, but unmanaged climbing use would continue as it currently exists. No changes would occur to roadside parking, restroom facilities, trails, staging areas, or signage.

Current impacts include erosion, trampling, and potential damage to cultural resources from unmanaged climbing activities, user-created trails, and dispersed camping. Some sites already show adverse effects from grazing and recreation. Without management, human presence and surface disturbance would likely increase, resulting in greater impacts on cultural resources. Continued creation of unauthorized trails would worsen soil erosion, potentially exposing shallow cultural deposits and increasing the risk of looting. Rock art panels, rock shelters, and other cultural features could be damaged by unauthorized climbing route development.

No additional cultural resource inventories or National Historic Preservation Act (NHPA) Section 106 consultations would occur under this alternative. Over time, impacts from unmanaged recreation, erosion, vandalism, and rodent activity could degrade or destroy characteristics that make sites eligible for the NRHP. In summary, the No Action alternative poses a higher risk to cultural resources, as unmanaged climbing and associated activities would continue to adversely affect historic properties.

Proposed Action

The Proposed Action would implement the Tensleep Canyon Climbing Management Plan to address safety and resource concerns. Future climbing route development would be allowed incrementally in areas only after cultural resource inventories and compliance with NHPA is completed (*Cultural 1*). Under the Proposed Action, additional cultural resource reviews and investigations would be completed prior to implementation of any site-specific activities such as converting certain user-created trails to NFS trails, developing a parking lot, or installing restrooms. Therefore, proposal activities are less likely to impact cultural resources.

To avoid impacts to eligible sites (*Cultural 1*) existing user-created trails near eligible sites would be either restricted to the existing trail footprint, rerouted, or removed and rehabilitated as appropriate to minimize disturbance. All other sites that are eligible for the NRHP or were left unevaluated for the NRHP by previous investigations are not located near management actions included in the Proposed Action and therefore would not be impacted.

Approximately 739 acres of cliff faces and 9.7 miles of trails would undergo cultural resource review prior to implementation. Prior to the removal and rehabilitation of current user-created trails, approximately 1.3 miles would need to be reviewed for cultural resources. If cultural resources are found during surveys or inadvertently discovered during implementation of

management actions, the Forest Service will stop work and contact the appropriate people (**Cultural 3**). Leigh Creek RNA would be closed to new climbing development to protect sensitive resources and would therefore have no further impacts from climbing and associated activities. As a result of the additional cultural resources reviews, the Proposed Action is unlikely to have negative impacts to cultural resources.

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