



OTHER RESOURCES REPORT

MILL CREEK CANYON ROAD IMPROVEMENTS PROJECT

FHWA Project No. UT FLAP SLA 10(1)



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1. INTRODUCTION

The Federal Highway Administration Central Federal Lands Highway Division (FHWA-CFLHD), in coordination with Salt Lake County, the City of Millcreek, and the U.S. Department of Agriculture, Forest Service (USFS), is proposing road improvements to a section of Mill Creek Canyon Road in Salt Lake County, Utah, to enhance access and safety for motorists and recreationists visiting federal lands in upper Mill Creek Canyon on the Uinta-Wasatch-Cache National Forest. The proposed improvements extend along 4.6 miles of upper Mill Creek Canyon Road from the Winter Gate to the Upper Big Water Trailhead (Figure 1). FHWA-CFLHD is contributing funding through its Federal Lands Access Program with Salt Lake County contributing a portion of the funds.

The project is in the preliminary design phase, and proposed improvements include roadway widening, modifications or relocation of trailhead and informal parking areas, establishment of an uphill bicycle lane from the Winter Gate to the Elbow Fork Trailhead, drainage improvements, and associated improvements, such as retaining walls, new signs, and pavement striping. Standard construction practices that would be part of the project are defined in the *Standard Specifications for the Construction of Roads and Bridges on Federal Highway Projects (FP-14)*, which is FHWA-CFLHD's guide for all construction projects. Pending completion of the environmental review process and receipt of necessary approvals and permits, construction of the improvements is anticipated to begin in summer 2025.

The project area was developed to include all areas within the construction limits and potentially subject to disturbance. It includes approximately 70 acres and is a 100-foot corridor centered on the existing roadway alignment (Figure 1). The project area includes extensions beyond the 100-foot corridor where potential parking improvements and drainage improvements are proposed.

This report presents an overview of aquatic resources, land use, recreation and access, and visual resources, anticipated resource issues associated with the proposed project, and FHWA-CFLHD's approach to assess effects and ensure compliance with applicable regulations and plans, such as the National Environmental Policy Act, the Clean Water Act, the 2003 Wasatch-Cache Revised Forest Plan (Forest Plan), and the Wasatch Canyons Master Plan and Wasatch Canyons General Plan Update. The purpose of this report is to share information with the public as part of the environmental process. Information contained in this report is expected to be incorporated into an environmental assessment, which will also be made available for public review in the near future. Information presented on the affected environment in this report is based on background research, field surveys, and coordination with other agencies.

Anticipated resource issues were identified based on the affected environment and current preliminary design, which is being refined based on input received at previous public meetings,

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agency meetings and coordination, and field visits. The potential need for project-specific avoidance and minimization measures will continue to be further refined as part of the environmental and design process.

2. AQUATIC RESOURCES

2.1 Affected Environment

Aquatic resources include streams, wetlands, springs, and open waters, such as ponds. These features are regulated under the Clean Water Act and are considered waters of the U.S. In addition, natural streams in Utah are regulated as part of the Stream Alteration Program under Section 73-3-29 of the Utah Code. A field survey of aquatic resources was conducted in September and October of 2021. Aquatic resources in the project area included the following:

- **Streams:** Four perennial streams occur in the project area. Mill Creek is the largest of these streams, generally flowing adjacent to Mill Creek Canyon Road throughout the corridor. Mill Creek flows west, eventually draining to the Jordan River. Three tributaries flow into Mill Creek. These tributaries are Elbow Fork, Thousand Springs, and an unnamed stream located on the south side of Upper Big Water Trailhead.
- **Open Waters:** A pond is located approximately 500 feet east of Alexander Basin, on the south side of Mill Creek Canyon. This feature is locally referred to as the “Beaver Pond”, although beavers are no longer present. This pond is located along Mill Creek and formed by water backing up behind woody debris that clogs a downstream culvert.
- **Springs:** Thousand Springs is located approximately 1,000 feet east of Alexander Basin, on the south side of Mill Creek Canyon (Figure 1). It consists of numerous springs and seeps found along the hillside. This water flows into a roadside ditch and eventually into Mill Creek.
- **Wetlands:** Wetlands are limited to three areas that are approximately 1.25 miles down canyon from Upper Big Water Trailhead. One is immediately adjacent to the Beaver Pond, opposite the roadway, and is dominated by willows. The second wetland is located on the south side of the road approximately 200 feet east of the Beaver Pond. This wetland sits at the base of the roadway fill slope from the road and is saturated, with a thick cover of herbaceous plants. The third wetland is located within Thousand Springs. It is on the lower third of the hillside at Thousand Springs and includes numerous herbaceous plants.

Additional information regarding aquatic resources is provided in the *Mill Creek Canyon Road UT FLAP SLA 10(1) Aquatic Resources Delineation Report* (HDR 2023).

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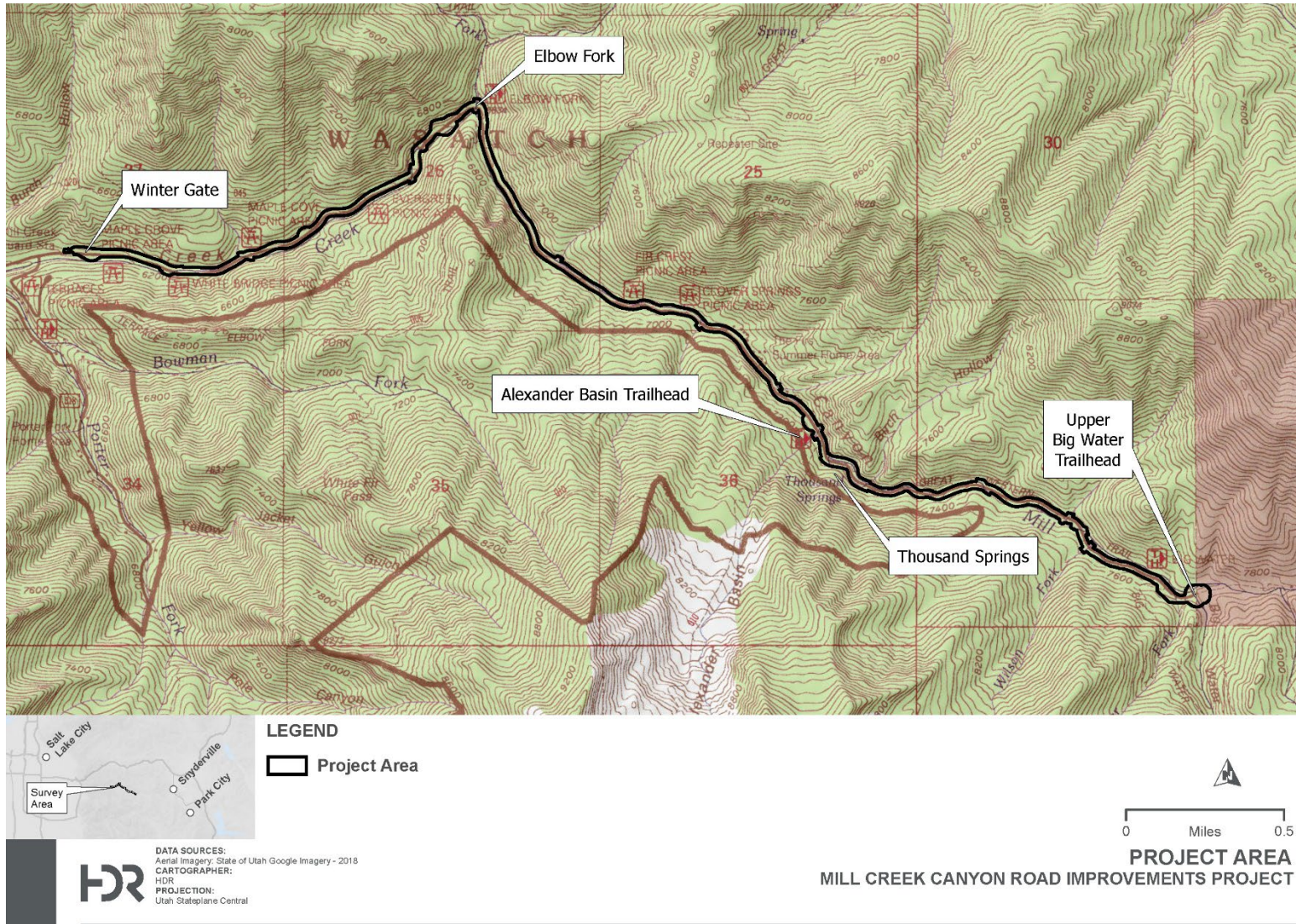


Figure 1. Project Area

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2.2 Anticipated Resource Issues

Based on the aquatic resource study and a preliminary review of the proposed road improvements, FHWA-CFLHD anticipates evaluating the following issues in more detail in the environmental assessment:

- Drainage improvements and activities along stream banks could result in the discharge of fill into and modification of Mill Creek and its tributaries, requiring permitting under federal and state laws.
- Temporary dewatering may be necessary for work in the active channel of Mill Creek or its tributaries.
- Roadway widening could result in the temporary disturbance and discharge of fill into one wetland adjacent to Mill Creek Canyon Road, also requiring permitting.

FHWA-CFLHD anticipates quantifying the amount of fill being placed in waters of the U.S. and analyzing the need to alter or modify natural streams to support permitting under the Clean Water Act and Utah Stream Alteration Program. The preliminary design is already incorporating context-sensitive design considerations, such as minimizing roadway widening to reduce the need for stream or wetland disturbance and applying standard construction practices to limit disturbance and protect streams and wetlands. In addition, FHWA-CFLHD may consider identifying environmentally sensitive areas (e.g., wetlands, streams) on design plans to ensure avoidance during construction.

3. LAND USE

3.1 Affected Environment

Mill Creek Canyon Road and associated trailheads and picnic areas are located on the Uinta-Wasatch-Cache National Forest. The road is within an existing 66-foot-wide highway easement over National Forest System lands and is maintained by Salt Lake County. USFS maintains the recreation amenities. The only location in the project area that is not on National Forest System land is the meadow immediately east of the Upper Big Water Trailhead. This meadowland is on property owned by Salt Lake County. A majority of the land in the project area is undeveloped open space. Developed areas include trailheads, trails, picnics areas, and one permitted residential area, the Firs Cabins Recreation Residence Tract.

The Revised Forest Plan for the Wasatch-Cache National Forest (USFS 2003) classifies the entire project area under the management prescription of “4.5 – Developed Recreation Area Emphasis” (USFS 2003). This is a multiple resource management prescription, with a recreation

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emphasis. These areas include developed facilities such as campgrounds and trailheads. High levels of visitor interaction can be expected, and access to these areas is primarily by motorized roads with some trails.

The meadow adjacent to the Upper Big Water Trailhead area is within an unincorporated area in Salt Lake County and is zoned FR-20 (Forestry and Recreation). It is managed under the *Wasatch Canyons Master Plan and Wasatch Canyons General Plan Update*. The purpose of the forestry and recreation zone is to permit the development of the foothill and canyon areas of the county for forestry, recreation, and other specified uses. The *Wasatch Canyons Master Plan and Wasatch Canyons General Plan Update* is an advisory document, serving as a policy guide for planning.

Two USFS Inventoried Roadless Areas (IRA) are located north and south of Mill Creek Canyon Road, the Mount Aire IRA and the Mount Olympus IRA. IRAs were established to provide relatively large blocks of habitat for plants and wildlife, aid in watershed health, and provide recreation opportunities. Although the IRA boundaries were intended to exclude Mill Creek Canyon Road, they overlap the project area in some locations due to mapping errors and updated mapping techniques.

3.2 Anticipated Resource Issues

Based on background research and a preliminary review of the proposed road improvements, FHWA-CFLHD anticipates evaluating the following issues in more detail in the environmental assessment:

- Some elements of the project, such as modified or extended parking areas, could change the land use of the area (e.g., from open space to developed recreation).
- The consistency of the project with applicable land use or management plans will need to be reviewed in more detail.
- Project activities, such as trailhead relocations and vegetation clearing, and modification of the existing highway easement could encroach into IRAs.

FHWA-CFLHD will continue to coordinate with USFS and Salt Lake County regarding the design to ensure the project is consistent with their respective planning goals and objectives. FHWA-CFLHD anticipates assessing how project-related activities could conflict with the IRAs and will continue to coordinate with USFS for its review and approval of any effects and changes within the IRAs.

4. RECREATION AND ACCESS

4.1 Affected Environment

Mill Creek Canyon is a heavily used recreation resource located near a metropolitan area that has experienced rapid growth over the last decade. Annual visitation continues to grow, and high usage is expected to continue.

Mill Creek Canyon Road is subject to seasonal closure. The closure begins at the Maple Grove Winter Gate, which is typically locked on November 1; however, early-season snowfall can result in earlier closures. The roadway reopens July 1—this date can also change depending on the amount of snowfall over the winter and spring.

Although closed approximately eight months of the year, upper Mill Creek Canyon Road sees considerable use. When snow-covered, the road is highly valued as a safe winter over-the-snow recreation opportunity. The road is groomed for cross-country skiing and is used by snowshoers, hikers, dog walkers, and snow-bikers. The snow-covered road provides access to backcountry terrain for skiers and snowboarders.

When the gate is closed but the road is dry, typically in late spring, the road provides road bikers a unique opportunity to ride without vehicular traffic. It is also used by walkers, runners, and dog walkers as a trail; for fishing access by anglers; and for upper trail access by mountain bikers. When the road is open, vehicles and bikers share the road. Most hikers, dogwalkers, anglers, and many mountain bikers access trailheads by car and park at the trailheads or along the road.

Mill Creek Canyon Road is popular with cyclists, as it offers a challenging and scenic 4.5-mile climb followed by a fast descent. No dedicated bicycle lanes are in the project area, so all cyclists use the travel lanes. Mountain bikers frequently use the trail system but will sometimes climb or descend Mill Creek Canyon Road to access trailheads. Mountain bikers using the trail system often cross Mill Creek Canyon Road at Elbow Fork to connect to popular downhill trails.

The project area contains six picnic areas, five major trailheads, and multiple trails. The trail system extends well beyond Mill Creek Canyon, tying into a network that provides access to Big Cottonwood Canyon, Lambs Canyon, and Park City. The picnic areas have parking, restrooms, and picnic sites with tables. The trailheads are described below.

- **Maple Grove Picnic Area/Winter Gate:** The Maple Grove Picnic Area is at the Winter Gate and serves as a trailhead at the west end of the project area. When the Winter Gate is closed, this area becomes the default access point for recreation uses in the upper canyon. During that time, demand consistently exceeds capacity, so recreationists often park in overflow lots located approximately 1,000 feet west. This trailhead has picnic tables and a restroom.

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- **Elbow Fork Trailhead:** The Elbow Fork Trailhead is at a sharp turn along Mill Creek Canyon Road and provides access to the Pipeline Trail, Mount Aire Trail, and Great Western Trail (Lambs Canyon) on the north side of the road. The Terraces to Elbow Fork Trail and Great Western Trail (Upper Pipeline) enter Elbow Fork from the south side of the road. Hikers and cyclists must cross and travel briefly along the roadway to the primary trailhead location. This trailhead has a restroom. Parking is directly off the roadway, so motorists leaving the trailhead must back into the roadway, with limited sight distance.
- **Alexander Basin Trailhead:** The Alexander Basin Trailhead is just east of the Firs Cabins on the south side of Mill Creek Canyon Road. The trailhead provides access to the Alexander Basin Trail and the Great Western Trail (Upper Pipeline). Parking is directly off the roadway, so motorists leaving the trailhead must back into the roadway. This trailhead does not have a restroom.
- **Lower Big Water Trailhead:** The Lower Big Water Trailhead is in the eastern portion of the project area and provides access to the Great Western Trail (Upper Pipeline) and the Lower Big Water Link Trail. This trailhead also serves as overflow parking for the Upper Big Water Trailhead and is connected by a trail that parallels the roadway. This trailhead has a restroom.
- **Upper Big Water Trailhead:** The Upper Big Water Trailhead is at the upper end of Mill Creek Canyon Road and provides access to the Great Western Trail, Little Water Trail, Big Water Trail, and Old Red Pine Road Trail. This trailhead has a restroom and the Big Water Mountain Yurt. The yurt is open from December 1 through April 30.

Mill Creek Canyon Road ends at the Upper Big Water Trailhead. This trailhead and Lower Big Water Trailhead fill up early on weekend mornings. Vehicles queue in this area, either waiting for a parking space to become available or waiting in line to turn around and head back down the canyon. The narrowest segments of Mill Creek Canyon Road are encountered approaching these two trailheads. At some locations, vehicles must pull onto the road shoulder to pass one another. During peak visitation, this increases congestion in the upper canyon.

Informal roadside parking is common, especially near popular trailheads and picnic areas. Informal parking is also used by anglers to access fishing spots. Most informal parking areas are large enough that vehicles can pull entirely off the road. However, smaller areas result in parked vehicles extending into the roadway, effectively further narrowing the road. Visitors who use informal parking walk along the road or use informal social trails adjacent to the road, which creates potential conflicts between motorists and pedestrians and can cause damage to vegetation.

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In addition to the recreation resources described above, the Firs Cabins are a Recreation Residence Tract consisting of 24 cabins authorized by the USFS through special use permits. Permittees can access the cabins throughout the summer season when the Winter Gate is open. Cabin leaseholders also have access during the shoulder seasons, when the gate is locked but the road is clear.

4.2 Anticipated Resource Issues

Based on background research and a preliminary review of the proposed road improvements, FHWA-CFLHD anticipates evaluating the following issues in more detail in the environmental assessment:

- Construction of the proposed improvements would require a full roadway closure, likely for two seasons and primarily in summer months. Most of the recreation resources in upper Mill Creek Canyon are expected to be unavailable during this time. Construction activities are unlikely to be able to take place in the winter, and winter recreation uses would remain available. FHWA-CFLHD and USFS will continue to coordinate with the Firs Cabins Summer Home Association to develop an access plan that allows some use during the construction season.
- Access throughout upper Mill Creek Canyon is expected to be improved, with congestion eased at the narrowest points in the canyon and parking consolidated at popular trailheads. Cyclists are expected to benefit from an uphill bicycle lane in the lower portion of the project area and a wider roadway in the upper canyon. This lane is expected to provide more space for motorists and cyclists to share the road and improve sight distance for all road users.
- The project does not currently include any operational or management changes. Once construction is complete, the opening and closing dates of the upper canyon would not be changed and the types of recreation use currently available to visitors would continue.

FHWA-CFLHD will coordinate with USFS to develop an access plan for trails in the project area that can be accessed from points outside the project area. This could allow for some recreational uses to continue, provided they do not interfere with construction. Also, FHWA-CFLHD will continue to refine design options to accommodate future uses and growing demand. This could include placing conduit throughout the project area for future communication needs and designing trailheads and parking lots to accommodate potential future transit vehicles. Designated recreation areas are also considered Section 4f properties or resources, and FHWA-CFLHD will evaluate use of them under Section 4f of the Department of Transportation Act. This process entails coordination with the managing agencies and may involve additional public

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outreach. The outcome of the Section 4f process will be presented in the environmental assessment or decision document for the project.

5. VISUAL RESOURCES

5.1 Affected Environment

Mill Creek Canyon Road extends from west to east through the project area. The valley is flanked by the Wasatch Mountains to the north and south, with peaks ranging from 7,000 to 10,000 feet. Mill Creek Canyon Road follows the landscape and contours of the valley floor and is generally adjacent to Mill Creek throughout the corridor. Riparian vegetation is found along streams, with upland plants occurring on adjacent hillsides. Oaks, maples, and grasses are typically found on south-facing slopes, and mixed conifer forests are on north-facing slopes. Numerous developed recreation areas are in the project area, including picnic areas and trailheads, as described above under Recreation and Access. In addition, historic, stone and concrete culverts are present, wayfinding signage is located throughout the corridor, and the Firs Recreation Residence Cabins are visible from select locations along the road.

The primary viewers are recreators using the roadway as a trail during the 8 months of the year when the road is closed to vehicles, motorists on Mill Creek Canyon Road, and visitors using the adjacent recreation amenities including trails and overlooks. From these locations, foreground views within 0.25 mile of the road include the roadway itself, signage and wayfinding, trailheads, picnic areas, streams, forests, and meadows. Much of the project area is undeveloped, so forests and meadows are the dominant foreground feature. Middle-ground views are typically upslope, taking in mountainsides, which include a mix of forested areas, rock outcrops, and rocky slopes. Background views are rare because they are mostly blocked by topography and vegetation but include the ridgelines that bound Mill Creek Canyon.

The USFS defines the landscape character for Mill Creek Canyon Roadway as “developed natural appearing” (USFS 2003). The surrounding landscapes are defined as “natural evolving” and “natural appearing”. Recreation facilities, concentrated use areas, and undeveloped recreation areas occur within the immediate foreground of the viewshed in some locations. Users anticipate infrastructure facilitating access but expect it to fit into the existing environment.

Scenic integrity is a measure of intactness within the landscape character unit. Units with little visual disruption are considered to have scenic integrity. Built features like trails, campgrounds, and picnic areas can be compatible with the landscape’s character and contribute to scenic integrity. The Scenic Integrity Objective in Mill Creek roadway is “high”, and the landscape within the canyon is “high” and “very high” (USFS 2003). A “high” scenic integrity means that

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the landscape appears intact. Deviations such as roads or structures may be present, but they mimic the scenic character well and are not evident. A “very high” scenic integrity means that the valued landscape character is intact with only subtle, if any deviations.

5.2 Anticipated Resource Issues

Based on background research and a preliminary review of the proposed road improvements, FHWA-CFLHD anticipates evaluating the following issues in more detail in the environmental assessment:

- Modifications to Mill Creek Canyon Road are expected to be compatible with the existing setting and should only be minimally noticed by travelers and visitors to the canyon. New structures or features along the road, such as retaining walls and signs, could cause more of a change to the visual setting if they are visible to users of the area. Design features are anticipated that allow new features to blend in with the existing setting, such as by using locally sourced materials to match the existing colors and shapes in the canyon, using aesthetic treatments, and consolidating signs to minimize visual clutter.
- Relocated and extended parking areas could alter the visual setting, introducing asphalt, bathrooms, and signage in areas that are currently undeveloped forests or meadows. The use of natural materials and aesthetic treatments, such as stone cobbles, colored concrete, and visually similar structures, are being considered to minimize the overall change in the visual setting.
- Vegetation removal could increase visibility of the middle-ground views as the areas along the road become more open. In areas where trees are removed, the edges of clearing could be feathered to mimic the existing forest edge.
- Replacement of White Bridge could alter the visual setting by adding a more modern appearing structure along the road. The new bridge railing, the primary visible feature, is expected to be constructed to match the size, scale, and appearance of the original railing, resulting in little visual change. The new culvert would be below the road and is unlikely to be visible from the roadway.

FHWA-CFLHD will continue to coordinate with USFS to incorporate design elements that are consistent with its visual resource management objectives. FHWA-CFLHD expects to develop simulations to include in the environmental assessment. The simulations would show how the roadway improvements and trailhead modification might alter the visual setting.

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