



# Public Scoping Information on Proposal to Rehabilitate 15.29 Miles of the Mineral King Road in Sequoia National Park

The National Park Service (NPS) is seeking public comment on a project to rehabilitate just over 15 miles of Mineral King Road within Sequoia National Park.

## Purpose and Need for Action

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Originating in Three Rivers, California and climbing 6500 feet in 25 miles to the road's terminus in the Mineral King Valley, the Mineral King Road provides access to hundreds of miles of wilderness trails within Sequoia National Park as well as two NPS front country campgrounds, Silver City Resort, and the small community of Mineral King.

The roadbed remains as it was originally constructed in the 1870's, and much of the road surface and features are in poor condition. Much of the road traverses steep sidehills, and significant rockfall occurs during the winter closed season and occasionally in summer. Failing walls and erosion have resulted in several thousand feet of longitudinal pavement cracking on the outside edge of the roadway which has narrowed the already-tight width of the road. All culverts along the roadway are past their designed lifetime, and many are undersized to enable adequate drainage of streams resulting in sheet flow on the roadway during high runoff or precipitation events. Many of the historic stone retaining walls are also failing and need rehabilitation to preserve the road.

Parking areas near the end of the road remain unpaved, are not compliance with the Architectural Barriers Act (ABA) for accessibility, and create social parking conditions that threaten to expand the developed footprint, encroach on natural and cultural resources, and create a chaotic parking environment and crowded visitor access points on busy days.

The purpose of this project is to rehabilitate the Mineral King Road in order to provide safe public access to the Mineral King Valley and surrounding wilderness within Sequoia National Park and to enable efficient road maintenance operations into the future all while preserving and protecting natural and cultural resources within the project area.

## Proposed Action

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The NPS, in cooperation with Central Federal Lands Highway Division of the Federal Highway Administration (FHWA), is proposing to resurface, restore, and rehabilitate 15.29 miles of the Mineral King Road. The proposed action includes re-paving the roadway within its existing width (including paving approximately one mile of road that is not currently paved), stabilizing and reinforcing cutslopes and the outside edge of the roadway, replacing and enlarging over 200 culverts, paving six currently unpaved parking lots near the end of the road, and adding accessible parking and equivalent experiences where feasible. Given the short construction season at high elevations, temporary road closures would likely be necessary throughout construction. The NPS anticipates that construction would begin, at the earliest, in 2023 and would occur over the course of several years.

## ROAD SURFACE AND SUBSURFACE

The Mineral King Road would be rehabilitated in accordance with current engineering design standards to preserve and extend the life of the roadway and enhance safety to the maximum extent possible. This project proposes to repave 13.91 miles of the Mineral King Road at existing widths along the roadway and pave 1.38 miles of the road that is currently unpaved (total of 15.29 miles; the entire length of the road within Sequoia National Park). The final paved width of the currently 1.38 mile unpaved section would be, approximately, the average width of the currently paved roadway (minus any paved pullouts).

Repaving Mineral King Road would require pulverizing and then compacting up to four inches of existing asphalt and re-grading the road to correct existing drainage, protect the roadway, and enhance visitor safety. In total, the project would reclaim approximately 210,000 square yards of asphalt; approximately 5,050 tons of aggregate would be laid as the subsurface material; and 30,800 tons of asphalt would be laid and compacted over the roadway for a total gained height of 2”-6” above the existing road surface. While the road surface would largely remain asphalt, due to past and ongoing threats of avalanches and highwater, one to two short sections of road would be surfaced with integral colored (black) concrete to increase durability of the roadway in critical locations while minimizing the visibility of the material.

In addition to the primary road, all paved pullouts along the Mineral King Road would be repaved under this project; all pullouts that are currently unpaved would remain unpaved. Short driveway aprons at intersections with secondary gravel roads and campgrounds would also be paved to protect grades and minimize erosion at points of entry/exit between different surface materials. The length of these aprons would vary depending on grade and materials of the intersection but would all be less than 20 feet long (increased length is required for steep slopes).

Because much of the road has been undermined by poor drainage, erosion, and loose slopes and subsurface materials, this project would involve slope stabilization along 12 miles of road, including 6,000 linear feet of reinforced outside edge and 10,000 square feet of reinforced shoulder. Stabilization would involve installation of several retaining/support walls, including four special rock embankments, two soil nail walls faced with horizontal timbers, and two soldier pile walls faced with colored concrete to match the hue of surrounding soils. All supporting walls would be installed below the road and therefore largely not visible to the average driver.

## DRAINAGE

Approximately 44,000 linear feet of ditches along the road would be cleaned/excavated and 40,000 linear feet of ditches would be paved with asphalt.

Due to the poor condition and minimal size of existing culverts, all culverts along the Mineral King Road would also be replaced and approximately nine new culverts would be installed, for a total of approximately 214 culverts. All existing rundowns (metal shoots placed on the downslope edge of the road to enable drainage and minimize erosion along the outside edge of the road) would be removed as they would no longer be necessary.

At least 170 of the culverts would be upsized by as much as 24 inches in diameter in comparison to the existing culvert to accommodate drainage, align with engineering standards, and in a few instances, improve the chances that fisher (*Pekania pennanti*) or other wildlife may utilize the structure to cross the roadway. At least one oversized culvert would be reduced in size. In a few locations where the roadway crosses perennial streams within high quality fisher habitat, an additional, dry culvert between 24 and 36 inches in diameter may also be installed within the drainage to serve as a wildlife crossing.

With the exception of a few culverts that may be constructed of concrete to enable a larger size for fisher crossing, culverts would be corrugated metal pipes with flared end sections. In the approximately 64 locations where the existing culvert has either a mortared stone or dry-stone headwall, the existing headwalls would be removed during culvert installation and then reset with a combination of existing stone and new stone of similar color. Approximately five of the largest culverts would require the installation of a concrete headwall and wingwall faced with stone to minimize the visibility of the concrete.

In a few instances, culvert inlets with steep upper embankments (none of which would be located at natural water crossings but are rather to capture and direct surface flows off the roadway) may be paved with a small concrete box to facilitate routine clearing of debris. All concrete used in these locations would be tinted to match surrounding duff or soil.

Approximately 3,000 cubic yards of stone rip rap may also be placed at culvert outlets to minimize potential erosion. Any riprap would match native material in color and texture. Disturbed areas adjacent to the riprap would be revegetated to reduce visibility of these added features.

## **ADDITIONAL ROAD FEATURES**

All non NPS signs—such as culvert markers and mileage posts—would be removed and replaced with standard markers. Two existing road gates would also be replaced with standard metal gates with improved functionality.

## **VEGETATION CLEARING AND REHABILITATION**

Approximately 9 acres of non-paved or aggregate surface impacted by construction would be revegetated. In addition, one impacted area above the existing Tar Gap Trailhead parking lot would be restored.

## **PARKING LOTS**

This project would re-pave the Ranger Station parking lot and formalize, grade, pave, and partially stripe all six trailhead parking lots. While the final, developed footprints of these parking lots would mostly align with the existing footprints, one parking lot would decrease in usable size and another would slightly increase in size. The details of parking lot modifications are outlined below.

At all parking lots, large boulders would be strategically placed to prohibit encroachment on surrounding vegetation, and timber stops would be used in formal parking spots. Bear-proof food storage boxes and trash/recycling containers would also be strategically placed within the developed footprint or along the perimeters of the parking lots to reduce conflicts with wildlife. Up to three circular metal bike racks, made of galvanized steel, would also be installed within the developed footprint or along the perimeter of each parking lot.

### **Ranger Station Parking Lot and Picnic Area Parking Lot**

The Mineral King Ranger Station parking lot would be repaved and would remain unstriped to accommodate the maximum number of short-term users. The northern half of the Ranger Station picnic area parking lot would be paved and one ABA parking spot and one standard parking spot striped. A colored concrete paved ditch would be installed at the southern boundary of the asphalt to improve drainage across the parking lot. The remaining portion of the parking lot would be aggregate, similar to existing conditions. Boulders would be added to slow encroachment and compaction of soils surrounding healthy trees near the creek.

To enable ABA accessibility, the NPS would construct an approximately 160-foot-long ABA trail to connect the parking lot to the existing amphitheater trail and the Ranger Station. A ramp would connect the trail to the porch of the Ranger Station.

The existing interpretive Ranger Station signage may also be relocated to the ABA trail; additional interpretive signage and a bronze tactile relief map would be installed near the ABA parking space. All signage would be made of weathering steel bases or powder-coated metal, with high-pressure laminate exhibit panels. Approaches to these displays would meet ABA standards for accessibility.

### **Tar Gap Parking Lot**

The upper portion of the Tar Gap Trailhead parking lot would be restored and no longer accessible for informal parking; the lower portion of the lot would be expanded to accommodate approximately ten vehicles.

### **Sawtooth Left (North) and Right (South) Parking Lots**

The Sawtooth parking lots would be paved within the existing developed footprint of these lots. In the right parking area, approximately twenty-one parking spaces, including one vehicle and trailer space would be striped in the northern section; the southern end would remain unstriped to maximize capacity for parking. A riprap apron would be installed at the southern edge of the right lot to slow and filter drainage to protect a nearby waterway. The left parking area would be paved to accommodate approximately 12 vehicles.

### **Restroom Parking**

The parking area associated with the ABA restroom near the end of Mineral King Road and adjacent to the East Fork Kaweah River Bridge would be paved and striped for one ABA accessible space and one standard parking space.

### **Parking Lot for Eagle Mosquito Trailhead (End of the Road)**

Although the end of Mineral King Road has been used as a public parking lot and trailhead for decades, the area is located on a 5-acre parcel of private land. Therefore, before any improvements could be made to this parking area, the NPS would pursue rights to at least a portion of the property (i.e., a scenic easement for the portion of the private parcel that would continue to be used by the public) to formalize NPS interest in providing and maintaining public access to this trailhead.

Should such rights be granted/obtained, the NPS would expand the parking lot at the end of Mineral King Road by a maximum of 36 feet to the north and minimally graded to enhance accessibility and improve drainage. The existing right hand entry pull off would remain aggregate and would be signed for trailer parking; parallel parking would be formalized along the southern edge of the lot; and perpendicular parking would be formalized in the remaining portions for a total of roughly 45 parking spaces, including one or two ABA spaces. The proposed layout would accommodate a medium sized vehicle and trailer to turnaround within the existing footprint. The existing trees in the middle of the lot, which are potential hazards, would be removed.

To improve visitor experience and enhance accessibility, a small developed interpretive wayside/picnic area would be constructed adjacent to the northeast portion of the lot near the Eagle-Mosquito trailhead. Orientation signage made of weathering steel bases or powder-coated metal and high-pressure laminate exhibit panels would be installed. In addition, a small sign directing visitors to the Cold Springs Nature Trail would be installed near the entrance of the parking area.

## **CONSTRUCTION**

### **Crew**

All construction would be performed by a contractor and overseen by a Federal Highways Engineer or representative. The NPS would also provide a liaison and support as needed. Optimal crew size would be

determined by the contractor but is expected to range anywhere between 5 and 100 staff dispersed through the project area at a given time.

### **Schedule**

Construction would begin no earlier than 2023 and would occur over the course of two to five years, depending on project phasing and contracting.

The construction schedule would include year-round work and night work during the summer months; the precise construction schedule would be determined in coordination with the contractor. Given varying elevation and temperatures across the 15.29 miles of road, most winter work would occur in the lower half of the road—below the second gate—with at higher elevations occurring as freezing temperatures dissipate during the spring/summer.

Although emergency access through construction areas would be reasonably accommodated at all times, sectional road closures would be integral to project implementation. At this time, the NPS is considering allowing a contractor to propose and implement longer closures during winter or off-season months that could extend for several days and allowing shorter closures of up to 2 consecutive hours during the day and several hours at night during the summer months. Should these closures be allowed, the NPS anticipates that no work would occur on weekends during June, July, and August, and would occur only on an as needed basis in September and October. Although several sections of the road could be closed at any one time, the contractor would allow all traffic through the construction in one pulse to avoid multiple delays for any one party. Entire parking lots would also be closed for several weeks at a time during phases of construction.

All proposed closures would require approval by the NPS prior to closure, and a strategic communications plan would be developed and implemented to communicate expectations for residents and visitors to the Mineral King Valley.

### **Staging**

At a minimum, staging locations would include the Ranger Lookout pullout towards the beginning of the project and would also likely include existing pullouts, parking lots, and potentially the Atwell or Cold Springs Campground.

### **Materials**

This project would require large amounts of various engineered materials. All imported materials and their sources would be identified by the contractor and approved by the NPS. Imported materials would be required to be free of any invasive seeds and plants. No known hazardous materials would be used or removed for the construction scope of work. Imported materials include the following (quantities are the maximum approximates/estimates; exact quantities may change due to conditions in the field):

- 1,365 cubic yards of backfill
- 5,050 tons of aggregate, subsurface material
- 2,890 cubic yards of riprap, class 2 – 7
- 17 boulders of various sizes
- 30,800 tons of Asphalt Concrete Pavement Mix ½” and ¾” nominal aggregate, 195,600 square yards of prime coat, 285 tons of blotter, and 90 tons of tack coat
- 80 tons of Fog Seal and 294 tons of antistrip additive Type 3
- 800 tons of cementitious material, 2-3 integral colors
- 530 square yards of concrete

- Roughly 214 corrugated metal pipes, 24” to 96” diameter, totaling over 9,000 linear feet
- 2 metal gates
- Roughly 450 signs and object markers
- NPS to provide seed for 9 acres of revegetation

## Equipment

At a minimum, this project would require the following types of heavy equipment, each estimated at approximately 200 hours of use: eight cubic yard dump trucks, backhoe loaders, wheel loaders, bulldozers, motor graders, excavators, water trucks, hydroseeding trucks, pavement equipment, and pickup trucks. All equipment would be inspected by NPS staff prior to entering the job site.

While much of this equipment would likely be used at any time of year, paving equipment would only be used in the upper portions of the road during the summer and early fall due to restrictions related to temperatures and installation of asphalt and concrete. Pulverization equipment would occur within 2 weeks prior to any paving work as this equipment would have some limited seasonality in the upper portions of the road as well.

## Resources of Concern

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### Giant Sequoias and Other Vegetation

The Mineral King Road traverses through a sequoia grove on its way to the Mineral King Valley; some sequoias are close to the road and each other—at times narrowing the road to a single lane road. Any demolition of the existing roadbed has the potential to damage sequoia roots; the NPS has therefore carefully surveyed sequoias that could potentially be impacted and identified mitigation measures to avoid such impacts. These mitigation measures include, but are not limited to: reduced depth pulverization, removal of existing asphalt by bucket or other non-destructive means around exposed sequoia roots, and, in some cases slightly elevating the road to avoid disturbance of sequoia roots. Specifically, near Sequoias that are immediately adjacent to the roadway, a “Sand Bridge” over Sequoia Roots would be installed to reduce soil compaction over roots. The NPS has also identified mitigation measures to reduce the potential for introducing non-native seed to disturbed areas and has developed a revegetation plan for areas impacted by construction.

### Mineral King Historic District

The Mineral King Road Cultural Landscape District (District) was listed in the National Register in 2003. The nomination determined the District as locally significant for its association with developments marking nationally administered recreation programs on federal lands in the American West. The District boundary generally extends 30 feet on either side of the centerline to include all features associated with the road (i.e., culverts, rock cuts and turnouts); as the road passes through Mineral King developed areas, the district expands to include the buildings, structures, and associated features of these developed areas. Although alterations to the road surface and features along the road, such as culverts, have the potential to affect the historic district, the NPS is following the *Secretary of Interior’s Standards for Rehabilitation of Historic Properties* to minimize impacts and retain and protect the integrity of the District. This includes, but is not limited to, maintaining the existing width of the paved roadway, using integral colored concrete to reduce its visibility when used, and using the same or similar materials when replacing headwalls on existing culverts.

### Fisher

The Sierra Nevada Distinct Population Segment of fisher (*Pekania pennanti*) was listed as endangered in 2020. Although critical habitat for the species has not been designated, the Mineral King Road traverses through

suitable fisher denning habitat. Because roads pose one of the greatest threats to the species, this project proposes to facilitate under roadway wildlife crossings by adding additional culverts and enlarging others beyond what would be required solely to meet current highway design standards.

## Visitor Use and Experience

Mineral King is one of the primary public access points to the wilderness areas of Sequoia and Kings Canyon National Parks. The area has two NPS campgrounds, a ranger station, NPS employee housing, and trailheads that are the primary departure point for half of the wilderness areas in Sequoia National Park. The road primarily serves park visitors to Mineral King and park wilderness, clients of Silver City Resort, and summer residents within a small cabin community of Mineral King. Every year, thousands of visitors travel up to Mineral King Valley for day use, frontcountry camping, and access to the wilderness.

During construction, delays and closures would be expected, though the NPS and FHWA would coordinate to maintain emergency and visitor access to the maximum extent practicable throughout the visitor use season. The NPS is particularly interested in feedback from the public related to potential closures and how access could be best accommodated throughout project implementation.

Post rehabilitation, the road would provide safer public access along the Mineral King Road, preserving public access in the long term. The road surface would be smoother as all sections would be paved; parking and interpretive information would be made ABA accessible; and parking would be formalized to avoid parking conflicts and enable safe turn-arounds particularly for larger vehicles like stock trailers.

## Join Us

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Interested parties can participate in a virtual webinar on Tuesday, April 27 at 4:00 p.m. (PST). For additional information on the webinar, visit the PEPC project website, listed above. Materials from the webinar will be posted to the project website following the event.

## How to Comment

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Public comments on the proposed action will be accepted via the PEPC project website April 20th until midnight, May 19<sup>th</sup>, 2021. Comments that provide insights about the current proposed action and potential mitigations around public closures are particularly helpful.

## Next Steps

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Following the public comment period, the NPS will analyze and consider all feedback, will modify and evaluate the proposed action as appropriate, and will move toward finalizing environmental reviews in compliance with the National Environmental Policy Act, the National Historic Preservation Act, and other applicable laws and policies.

The NPS will not make a decision on the proposed action until after the analysis of the proposed action and its potential impacts has been completed.

## Project Website

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<http://parkplanning.nps.gov/MineralKingRoadRehab>