



FERGUSON SLIDE

Restoration Project



Aesthetic Treatments



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Aesthetic Treatments



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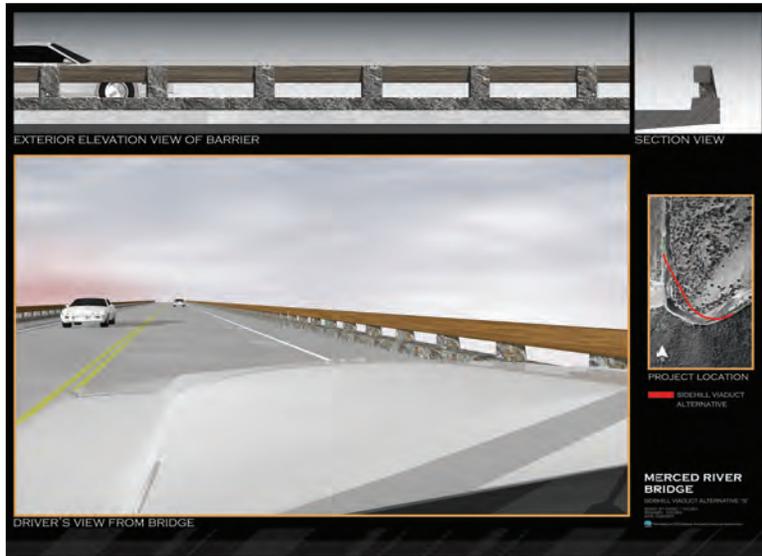


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Alternatives

Alternative C *(Open-Cut Realignment)*

Realign the highway to the northeast spanning the Merced River and bypassing the rockslide. State Route 140 would cut through the mountain across from the rockslide and then span back across the river where it would meet the existing alignment. Two bridges would be constructed to cross the river. The highway would be constructed with two 12-foot lanes and 8 foot outside shoulders.

Alternative T *(Tunnel Realignment)*

Realign the highway to the northeast spanning the Merced River and bypassing the rockslide. State Route 140 would tunnel through the mountain across from the rockslide and then span back across the river where it would meet the existing alignment. Two bridges would be constructed to cross the river. The highway would be constructed with two 12-foot lanes and 8 foot outside shoulders.

Alternative S *(Viaduct Realignment)*

Realign the highway to the northeast spanning the Merced River with two bridges and bypassing the rockslide with a hill-side viaduct. The highway would be constructed with two 12-foot lanes and 8 foot outside shoulders.

No Build

The No-Build Alternative would leave State Route 140 damaged and blocked by the Ferguson rockslide. As a result of the No-Build Alternative, the temporary detour would become the permanent State Route 140 alignment. The current vehicle length restrictions would remain in place along with the traffic signals controlling the single-lane access through the detour. The structures for the temporary detour were constructed during a declared emergency and were designed as a temporary solution to the closure of State Route 140. These structures would not meet standard design features nor would the detour meet the purpose and need of the project.



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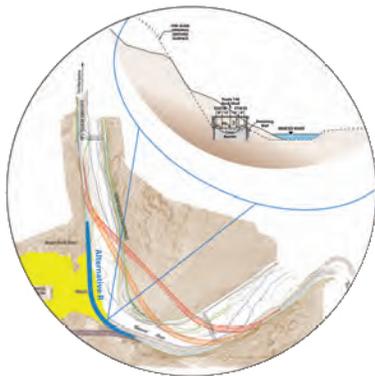
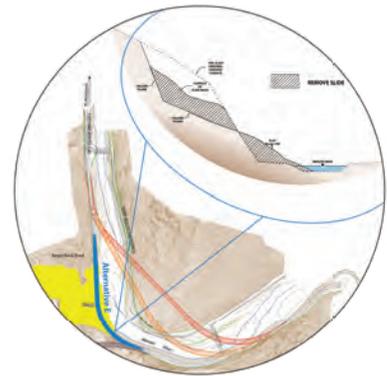


Alternatives Considered but were Withdrawn

Alternative E

Alternative E (Slide Removal) proposed to remove the rockslide and restore State Route 140 on the existing alignment. This alternative was considered and withdrawn by the project development team for the following reasons:

- The rockslide would have to be removed from the top down and would require constructing a 30-foot-wide, two-lane road to the top of the rockslide.
- The nearest disposal site for the rockslide material would be more than 20 miles away in Midpines.
- To remove the complete rockslide, it would require 266 working days and 200 trips per day on the highway from the project area to Midpines to remove 3,000 tons of rockslide material per day using the typical 15-ton-capacity mining trucks.
- There is a potential that once the rockslide material was removed, additional material upslope could begin to slide down.



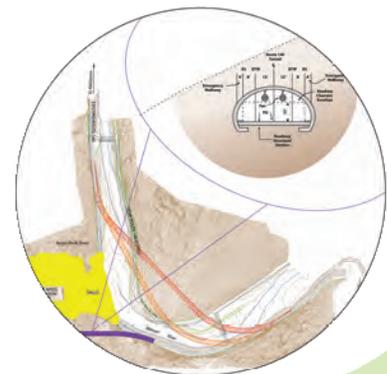
Alternative R

Alternative R (Rock Shed/Tunnel) proposed to construct a rock shed or tunnel through the rockslide talus (rock debris) and restore State Route 140 on the existing alignment. This alternative was withdrawn because:

- Constructing the rock shed would result in a longitudinal encroachment on the floodplain. Executive Order 11983 directs that longitudinal encroachments on the floodplain should be avoided unless it is the only practicable alternative.
- Potential dormant rockslides were identified adjacent to the Ferguson rockslide and could affect the rock shed if they become active in the future.
- Constructing the rock shed would result in a take of Limestone salamander habitat, which is fully protected by the State of California. The California Department of Fish and Game cannot issue a permit for any amount of take on this habitat.
- Constructing the rockshed through the rockslide would expose construction personnel, equipment, and structures to potentially falling rocks.

Alternative T-2

Alternative T-2 (Southern Tunnel Realignment) proposed to realign the highway south of the Ferguson rockslide by tunneling one mile through the mountain from the existing State Route 140 alignment. This alternative was considered during the alternative development process, but was rejected because of an excessive cost of \$378 million and because the duration to construct the tunnel was determined to be too lengthy.





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Public Comment

- Written comments may be placed in the comment box tonight.
- Written comments may also be sent to:

CALTRANS

Environmental Planning

Juergen Vespermann

2015 E. Shields Ave., Suite 100

Fresno, CA 93726

e-mail: juergen_vespermann@dot.ca.gov

- Concerns may be expressed directly to a Caltrans representative tonight.

All comments need to be submitted in writing by January 3, 2008 or verbally through the court reporter provided tonight.

Thank you for attending this evening.

CATTRANS/Central Region
Environmental Branch/Unit 898
Juergen Vespermann
2015 East Shields Avenue, Suite 100
Fresno, CA 93726

Please Place
Stamp Here

fold along line



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COMMENT CARD

State Route 140 Ferguson Slide Restoration Project
in Mariposa County

November 28 & 29, 2007

NAME: _____

ADDRESS: _____ CITY: _____ ZIP: _____

REPRESENTING: _____

Do you wish to be added to the project mailing list? YES NO

Please drop comments in the Comment Box or Mail to:

CALTRANS/Central Region
Environmental Branch/Unit 898
Juergen Vespermann
2015 East Shields Avenue, Suite 100
Fresno, CA 93726
email: juergen_vespermann@dot.ca.gov

I would like the following comments to be considered (please print): _____

*Comments to be submitted in writing
no later than January 3, 2008.*





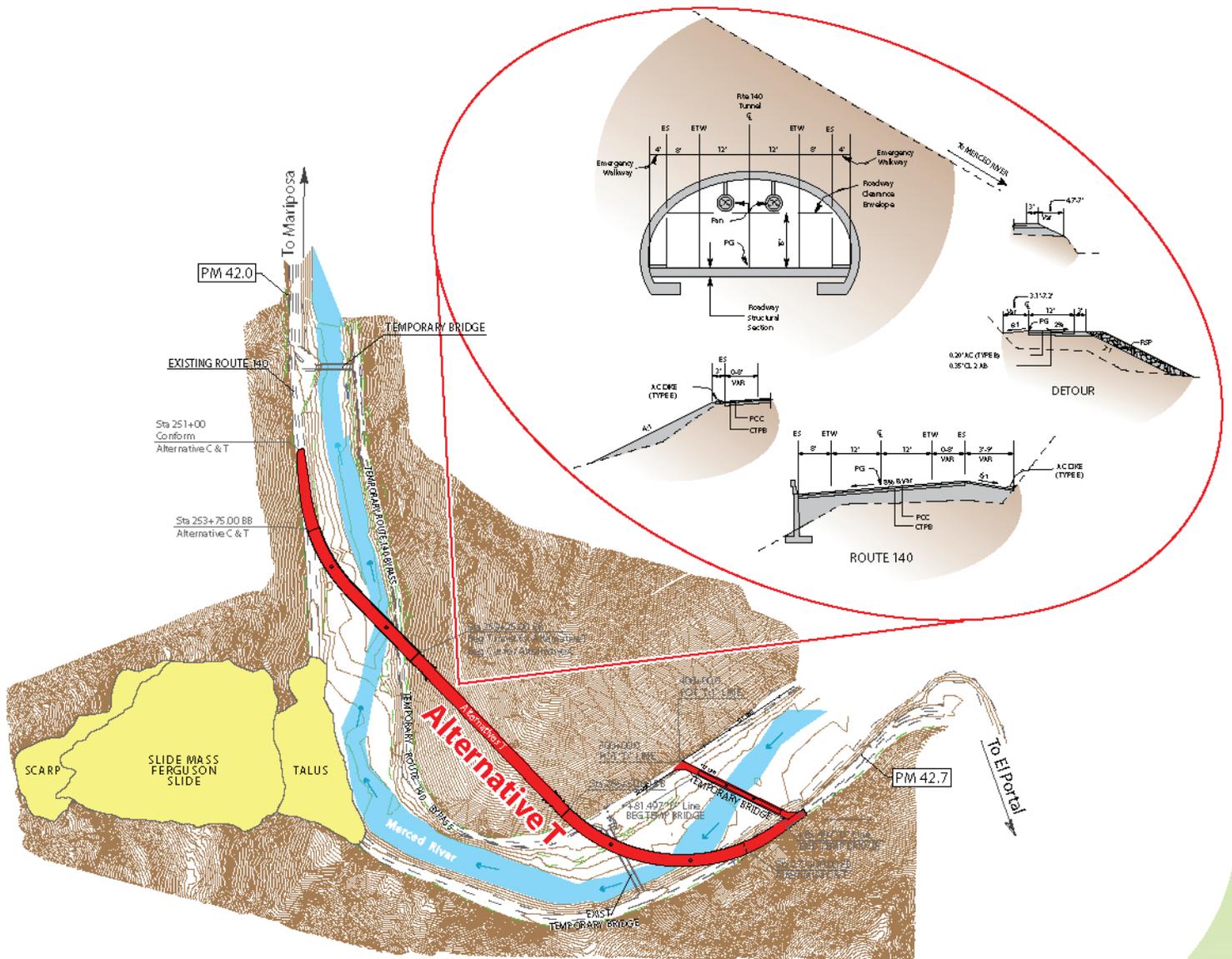
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Typical Cross Sections

ALTERNATIVE "T"



Not to Scale



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Project Description

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration proposes to permanently restore the section of State Route 140 that was damaged by the Ferguson rockslide. The following alternatives are being considered:

Alternatives	Description	Cost
C	<i>Realign the highway to the northeast, spanning the Merced River and bypassing the rockslide. The highway would cut through the mountain across from the rockslide and then span back across the river where it would meet the existing alignment. Two bridges would be constructed across the river. The highway would be constructed with two 12 foot lanes and 8 foot outside shoulders.</i>	\$62.2 Million
T	<i>Realign the highway to the northeast, spanning the Merced River and bypassing the rockslide. The highway would tunnel through the mountain across from the rockslide and then span back across the river where it would meet the existing alignment. Two bridges would be constructed to cross the river. The highway would be constructed with two 12 foot lanes and 8 foot outside shoulders.</i>	\$72.5 Million
S	<i>Realign the highway to the northeast, spanning the Merced River with two bridges and bypassing the rockslide with a hillside viaduct. The highway would be constructed with two 12 foot lanes and 8 foot outside shoulders.</i>	\$33.3 Million
No Build	<i>State Route 140 would remain damaged and blocked by the rock slide. Temporary bridges will remain in place. This alternative would not meet the Purpose (restore full use of SR 140) and Need (restore Safety, Security and Welfare of communities affected by the slide) of the project.</i>	\$0

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Project History



State Route 140 is a two-lane highway that begins at Interstate 5 on its western end and serves such cities and towns as Merced, Cathey's Valley, Mariposa and El Portal before it ends at Yosemite National Park on its eastern end. State Route 140 provides travelers year-round access to not only Yosemite National Park but other recreational areas such as the San Luis and Kesterson National Wildlife Refuges, the Sierra National Forest, and the Merced River.



- Within the Merced River Canyon, unusually heavy rainfall in March and April 2006 destabilized the steep hillside above State Route 140 and rockslide activity began in the area on April 29, 2006. Since April 2006, rockslides have damaged and blocked State Route 140 between Mariposa and El Portal.
- State Route 140 was closed to traffic periodically until concrete barriers and protective fencing were erected in late May. One lane of the highway was reopened to vehicles on May 25, but another rockslide damaged the barrier and the highway was closed again.
- On May 28, a major rockslide covered approximately 600 feet of the highway. As a result, State Route 140 was closed to traffic from 8 miles east of Briceburg to approximately 7.6 miles west of El Portal. The closure of State Route 140 created severe hardships for residents and businesses in the area. It became necessary to reopen State Route 140 as soon as possible.
- A State of Emergency in Mariposa County was declared that expedited work on a temporary highway detour around the rockslide. The California Department of Transportation began an emergency project to bypass the rockslide on the eastbound side of State Route 140.
- The emergency detour project erected two bridges across the Merced River to temporarily divert traffic on State Route 140 around the Ferguson Rockslide until a permanent solution could be developed and built.



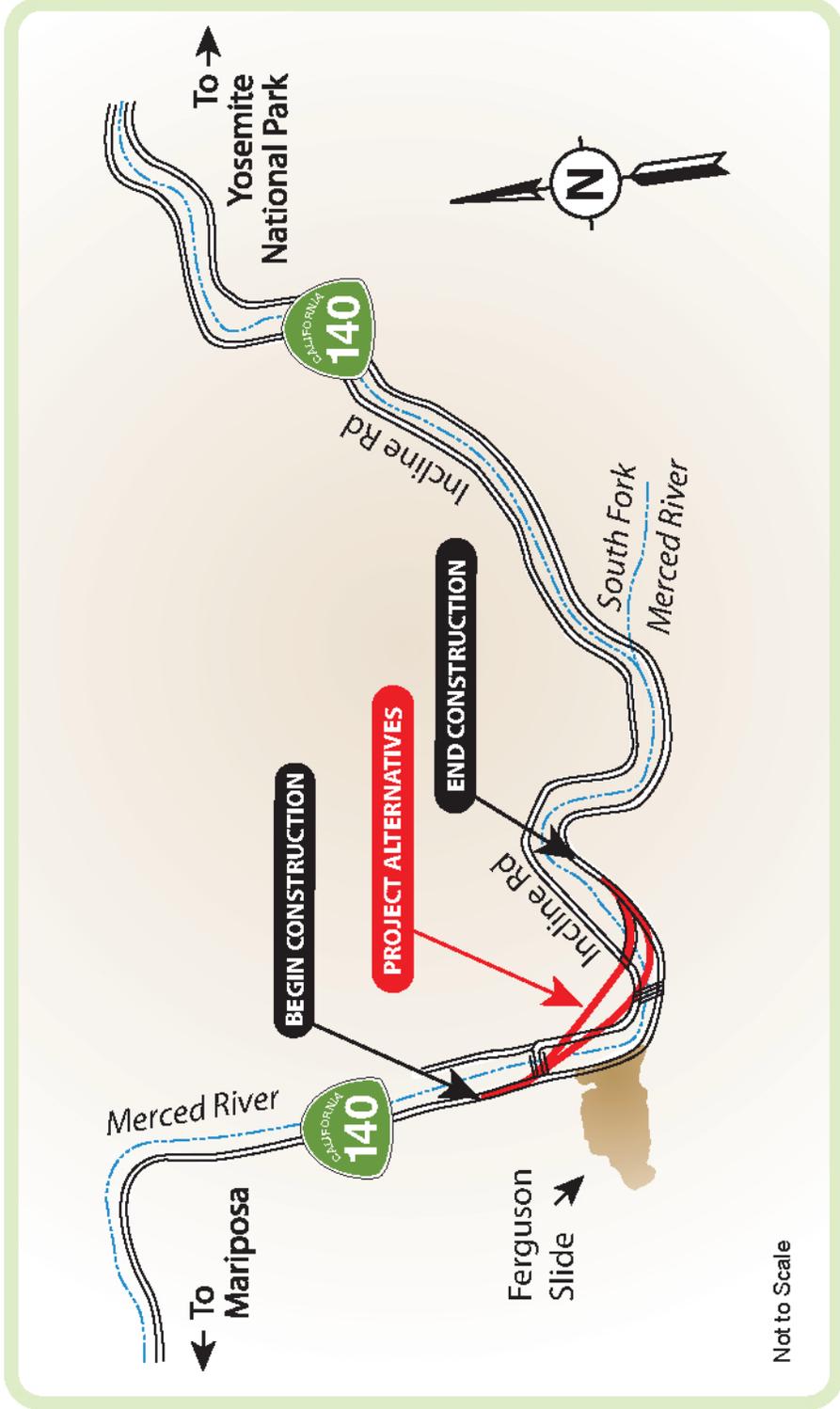


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Restoration Project



State Route 140 Ferguson Slide Restoration Project in Mariposa County



For more information, please contact:

Juergen Vespermann, Senior Environmental Planner at (559) 243-8157, or email: juergen_vespermann@dot.ca.gov
or write to Juergen Vespermann, Caltrans, 2015 E. Shields Avenue, Suite 100, Fresno, CA 93726





FERGUSON SLIDE

Restoration Project



INFORMATION SHEET

State Route 140 Ferguson Slide Restoration Project in Mariposa County

November 28 & 29, 2007

Project Purpose: The purpose of the project is to reopen and restore full access to the section of State Route 140, which was damaged by the Ferguson rockslide. Currently, motorists use a temporary bypass route to travel this portion of State Route 140. Restoration of State Route 140 would eliminate inconvenient detours or extended commute times for residents, businesses, and workers in the area. Restoration of the route would also give travelers a direct route to Yosemite National Park and other destinations along State Route 140. Three build alternatives and one no-build alternative are being considered.

Project Background: State Route 140 is a two-lane highway that begins at Interstate 5 on its western end and serves such cities and towns as Merced, Cathey's Valley, Mariposa and El Portal before it ends at Yosemite National Park on its eastern end. State Route 140 provides travelers year-round access to not only Yosemite National Park but other recreational areas such as the San Luis and Kesterson National Wildlife Refuges, the Sierra National Forest, and the Merced River. Since April 2006, rockslides have damaged and blocked State Route 140 in the Merced River Canyon between Mariposa and El Portal. A State of Emergency was declared and a temporary emergency detour was constructed to reopen State Route 140 and bypass the rockslide.

Project Description: The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration propose to permanently restore the section of State Route 140 that was damaged by the Ferguson rockslide. The following alternatives are being considered:

- **Alternative C** Realign the highway to the northeast, spanning the Merced River and bypassing the rockslide. The highway would cut through the mountain across from the rockslide and then span back across the river where it would meet the existing alignment. Two bridges would be constructed to cross the river. The highway would be constructed with two 12-foot lanes and 8 foot outside shoulders.
- **Alternative T** Realign the highway to the northeast, spanning the Merced River and bypassing the rockslide. The highway would tunnel through the mountain across from the rockslide and then span back across the river where it would meet the existing alignment. Two bridges would be constructed to cross the river. The highway would be constructed with two 12-foot lanes and 8 foot outside shoulders.
- **Alternative S** Realign the highway to the northeast, spanning the Merced River with two bridges and bypassing the rockslide with a hill-side viaduct. The highway would be constructed with two 12-foot lanes and 8 foot outside shoulders.
- **No Build** State Route 140 would remain damaged and blocked by the rock slide. Temporary bridges will remain in place. This alternative would not meet the Purpose (restore full use of SR 140) and Need (restore Safety, Security an Welfare of communities affected by the slide) of the project.

Cost: Construction costs for the alternatives range from \$33 million to \$73 million.

Funding Source: Federally funded through the Major Damage Permanent Restoration Program.

Project Timeline: Begin Construction: Summer 2008 or sooner
Project Completed: Spring 2012 or sooner

For more information, please contact:

Juergen Vespermann, Senior Environmental Planner at (559) 243-8157, or email: juergen_vespermann@dot.ca.gov or write to Juergen Vespermann, Caltrans, 2015 E. Shields Avenue, Suite 100, Fresno, CA 93726

Project Map on Back



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Merced River's Wild and Scenic River Outstandingly Remarkable Values



Geology – the project area is in a steep inner gorge with highly fractured rocks. Exposure of the rocks within the canyon has provided an opportunity for understanding the geologic history of the area. Rockslides appear to be characteristic of the geology of the area. All cuts should be at a 1:4 slope ratio, and made to minimize the possibility of producing minor rockfalls as well as to retain existing rock outcropping where possible. Build Alternatives C, T and S would avoid topographic features adjacent to the Ferguson rockslide that could be dormant rockslides.



Image provided by Corrie Robinson of The Department of Transportation

Vegetation – the Merced River Canyon in the project area harbors several species of plants, such as Tompkins' sedge (*Carex tompkinsii*), smallflower monkeyflower (*Mimulus inconspicuus*), Mariposa/Merced clarkia's (*Clarkia* spp.), and elongate copper moss (*Mielichhoferia elongate*). Build Alternatives C, T and S completely avoid impacts to all but three patches of copper moss. The clumps of moss that would be removed are on ledges of human-made rock faces that were created when the highway and rail beds were originally built. Any further cuts into these rock faces that create vertical walls and/or underhangs would only reestablish new habitat for the moss rather than diminish any habitat.

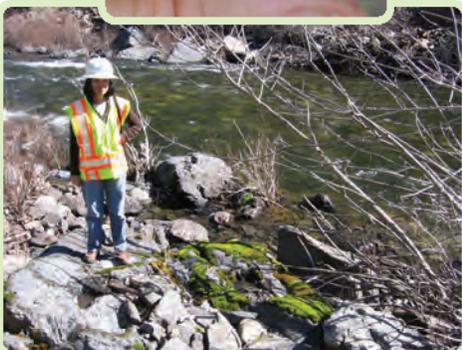


Image provided by Sarah Johnson of The Department of Transportation

Cultural (pre/historical, traditional) – To comply with Section 106 of the National Historic Preservation Act, Caltrans archaeologists and architectural historians conducted archival research and a pedestrian survey of the Ferguson Slide project area and recorded four historic sites and one prehistoric site. The results of the survey are summarized in the September 2007 Historic Property Survey Report. The Historic Property Survey Report concluded that the proposed project would not affect the historic values of the Merced River. The State Historic Preservation Officer concurred with Caltrans' findings on October 10, 2007. Caltrans is continuing to coordinate with the U.S. Forest Service, Bureau of Land Management and the American Indian Council of Mariposa for pre-historic and historic as well as possible ongoing traditional uses in the area of the proposed project.

Site CA-MRP-001566 - a prehistoric bedrock mortar site would be protected during construction by designation as an Environmentally Sensitive Area. Environmentally Sensitive Area fencing would be installed during construction and monitored by professionally qualified staff.

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Merced River's Wild and Scenic River Outstandingly Remarkable Values: Wildlife



Young *H. brunus*

Various *H. brunus* habitats

Limestone salamanders (*Hydromantes brunus*) live in crevices of cliffs and ledges and in limestone under the canopy of foothill-oak woodland, especially where the rocks are overgrown with moss. They are active during the fall, winter, and spring rains, especially during cold spells. The Limestone salamander only occurs along some segments of the Merced River drainage, all of which are within an approximately 5-mile radius of the project area. The limestone salamander was designated as a threatened species by the State of California in 1971. It is also designated as fully protected, which means that an impact to this species cannot be authorized through the usual permitting process.

Alternatives C, T, and S would completely avoid impacts to the Limestone salamander through the implementation of the following measures:

- Environmentally Sensitive Area fencing would be placed along the southern slope of the canyon to prevent any construction equipment from entering that area.
- No construction activities would occur on the south side of the river between December and March unless a full time biological monitor is present.
- The proposed bridge approaches would be adjusted to avoid cutting into the southern slope of the canyon.



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Partners in Delivery



US Forest Service

Bass Lake Ranger District
57003 Road 225
North Fork, CA 93643
559-877-2218



CA Department of Fish and Game

Central Region Office
1234 East Shaw Avenue
Fresno, CA 93710
559-243-4005 extension 151



US Army Corps of Engineers

Regulatory Branch
1325 J. Street
Sacramento, CA 95814
916-557-5100



Bureau of Land Management

Bureau of Land Management
63 Natoma Street
Folsom, CA 95630
(916) 985-4474



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Environmental Process

Scoping *Define the Alternatives
Public Information Meeting*

**Alternatives
Analysis** *Complete Engineering and Environmental
Analysis for Alternatives*

**Draft Environmental
Document** *Prepare Preliminary Results of Impact Assessment
Develop Mitigation Measures*

**Public/Agency
Review & Comment
Ends January 2008
In Progress** *Circulate Draft Environmental Document
Public/Agency Review and Comment
Public Hearing*

**State/Federal
Review & Approval** *Formal Response to Comments
Identify Preferred Alternative
Present Findings
Prepare Final Environmental Document
Beginning January 2008*



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Wild & Scenic River



What's a Wild & Scenic River?

A Wild & Scenic River is free-flowing, natural and un-modified. Congress designates Wild & Scenic Rivers based on three characterizations: Wild, Scenic or Recreational. Rivers may have different designations in different segments. The character of a Wild & Scenic River is based on its outstandingly remarkable values. Some categories of outstandingly remarkable values include scenic, recreational, geologic, scientific, fish & wildlife, historic, and cultural. The outstandingly remarkable values of the Merced Wild and Scenic River within the project area are:

- Geology
- Vegetation
- Wildlife
- Cultural (pre/historical, traditional)
- Recreation

Who's in charge of the Wild & Scenic River?

The Merced River flows through National Forest land within the project limits. The Managing Agency of this Wild & Scenic River is the U.S. Forest Service. However, Caltrans is the lead agency for the restoration project and will produce the Environmental Document in coordination with U.S. Forest Service, U.S. Army Corps of Engineers, Bureau of Land Management, and the CA Department of Fish and Game.

What's a Section 7 Evaluation?

Some project alternatives would require work within the riverbed and below the high water mark of the river. Section 7 of the Wild & Scenic River Act requires evaluation of project alternatives to determine their impact and effect on the river's character, designation and flow. Changes in project design or location may be proposed as a result of the information gathered during the Section 7 Evaluation. The Wild and Scenic River Act Section 7 Evaluation is in progress.



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Project Cost and Schedule

Estimated Cost:

Alternative C (<i>Open-Cut Realignment</i>)	\$62.2 million
Alternative T (<i>Tunnel Realignment</i>)	\$72.5 million
Alternative S (<i>Viaduct Realignment</i>)	\$33.3 million
No Build	\$0 million

Anticipated Schedule:

- Final Environmental Document – Spring 2008
- Begin Construction – Summer 2008
(or sooner)
- End Construction – Spring 2012
(or sooner)



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Environmental Studies

- **Community Impact Assessment**
completed July 2007
- **Architectural History**
Completed September 2007
- **Prehistoric and Historical Archeology**
Completed June 2007
- **Floodplain Evaluation**
Completed October 2007
- **Natural Environment Study**
Completed October 2007
- **Geotechnical Study**
Completed August 2007
- **Water Quality Assessment**
Completed September 2007
- **Paleontology Study**
Completed July 2007
- **Hazardous Waste Assessment**
Completed June 2007
- **Visual Impact Assessment**
Completed October 2007
- **Draft Wild and Scenic River Evaluation**
In Progress



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RECREATIONAL SURVEY

State Route 140 Ferguson Slide Restoration Project in Mariposa County

November 28 & 29, 2007

NAME: (optional) _____

ADDRESS: _____ CITY: _____ ZIP: _____

1. Have you ever white water rafted along the Merced River?

YES NO

If yes, do you feel the Ferguson Slide Restoration project would decrease your recreational experience on the Merced River? _____

If yes, in what way? _____

2. Have you ever biked or hiked within the project area (ex. along Incline Road)?

YES NO

If yes, do you feel the Ferguson Slide Restoration project and/or the enhancements to Incline Road decrease the natural recreational experience of the environment? _____

If yes, in what way? _____

3. Overall, do you feel the Ferguson Slide Restoration project would decrease the Outstandingly Remarkable Values, as you understand them, of the Merced River within the project area?

YES NO

If yes, please specify how? _____





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Why are we here tonight?

- **To present the project study area and the proposed alternatives.**

Please view displays of the study area and preliminary engineering drawings for the proposed alternatives. Feel free to browse and ask questions.

- **To obtain your comments on the project and Environmental Assessment/Initial Study with Proposed Mitigated Negative Declaration.**

View the displays and ask any of our representatives to describe what we do when we conduct our studies.

- **To obtain public comment regarding this project and to answer your questions.**

Project staff is available to answer your questions. Written comments may be placed into the comment box or mailed directly to our office. Concerns may be expressed directly to the representatives, staff and/or court reporter present at this meeting.