

# Memorandum

TAB 24

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: May 21, 2014

Reference No.: 2.2c.(6)  
Action Item

From: *Norma Ortega*  
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Environmental Analysis

Subject: APPROVAL OF PROJECT FOR FUTURE CONSIDERATION OF FUNDING  
10-Mpa-140, PM 42.0/42.7  
RESOLUTION E-14-20

## RECOMMENDATION:

The California Department of Transportation (Department) recommends that the California Transportation Commission (Commission), as a responsible agency, approve the attached Resolution E-14-20.

## ISSUE:

The attached resolution proposes to approve for future consideration of funding the following project for which a Final Environmental Impact Report (FEIR) has been completed:

- State Route 140 (SR 140) in Mariposa County. Restore full highway access on SR 140 damaged by the Ferguson rockslide near the town of El Portal. (PPNO 0280)

This project in Mariposa County will construct repairs or a permanent bypass on a portion of SR 140 that was blocked and damaged by the Ferguson rockslide. The project is programmed in the 2014 State Highway Operation and Protection Program. The total estimated cost is \$132,550,000 for capital and support. Construction is estimated to begin in Fiscal Year 2015-16. The scope, as described for the preferred alternative, is consistent with the project scope programmed by the Commission in the 2014 State Highway Operation and Protection Program.

A copy of the FEIR has been provided to Commission staff. Resources that may be impacted by the project include: aesthetics, cultural resources, community impacts, noise, geology and soils, hazardous waste, water quality, biological resources, and traffic.

Potential impacts associated with the project can all be mitigated to below significance through proposed mitigation measures with the exception of aesthetics, cultural, and biological resources, causing a Statement of Overriding Considerations to be prepared for the project. As a result, a FEIR was prepared for the project.

*→ geology and soils*

Attachments

## **CALIFORNIA TRANSPORTATION COMMISSION**

### **Resolution for Future Consideration of Funding 10-Mpa-140, PM 42.0/42.7 Resolution E-14-20**

- 1.1** **WHEREAS**, the California Department of Transportation (Department) has completed a Final Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines for the following project:
- State Route 140 (SR 140) in Mariposa County. Restore full highway access on SR 140 damaged by the Ferguson rockslide near the town of El Portal. (PPNO 0280)
- 1.2** **WHEREAS**, the Department has certified that a Final Environmental Impact Report has been completed pursuant to CEQA and the State CEQA Guidelines for its implementation; and
- 1.3** **WHEREAS**, the California Transportation Commission, as a responsible agency, has considered the information contained in the Final Environmental Impact Report.
- 1.4** **WHEREAS**, the project will have a significant effect on the environment.
- 1.5** **WHEREAS**, a Statement of Overriding Considerations was prepared; and
- 1.6** **WHEREAS**, Findings were made pursuant to the State CEQA Guidelines.
- 2.1** **NOW, THEREFORE, BE IT RESOLVED** that the California Transportation Commission does hereby support approval of the above referenced project to allow for consideration of funding.

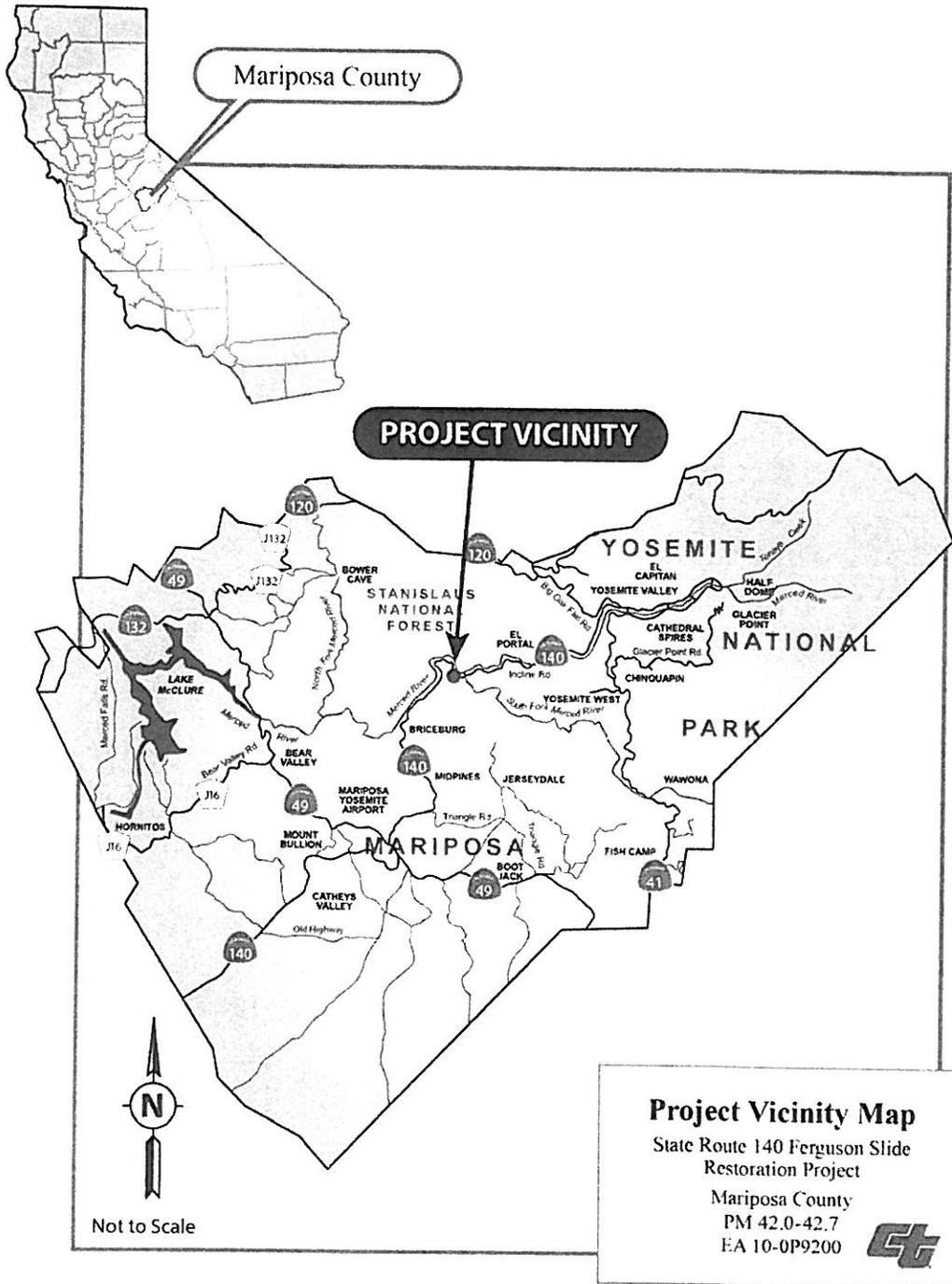


Figure 1-1 Project Vicinity Map

## STATEMENT OF OVERRIDING CONSIDERATIONS

### CALIFORNIA DEPARTMENT OF TRANSPORTATION STATEMENT OF OVERRIDING CONSIDERATIONS FOR FERGUSON SLIDE PERMANENT RESTORATION PROJECT 10-MPA-140-PM 42.0/42.7 (ID 1000000198) SCH#2008011118

The following information is presented to comply with State CEQA Guidelines (Title 14 California Code of Regulations, Chapter 3, Section 15903), and the Department of Transportation and California Transportation Commission Environmental Regulations (Title 21 California Code of Regulations, Chapter 11, Section 1501). Reference is made to the Final Environmental Impact Report (FEIR) for the project, which is the basic source for the information.

The following impacts have been identified as significant and not fully mitigable:

**Wild and Scenic Rivers (Wildlife)** – Suitable limestone salamander habitat and the presence of this species occur on the southern slope next to the existing State Route 140. Completion of the preferred alternative would directly remove 2.10 acres of limestone salamander habitat and likely cause a take of the species, resulting in short-term effect from construction. Long-term indirect effect of habitat fragmentation may also result from habitat isolation.

**Wild and Scenic Rivers (Cultural and Historical Landscape)** – The historic and prehistoric sites within the project area along with the ethnographic features are part of the unique historic context of the Merced River Canyon. Little change has occurred to the setting of the canyon since the construction of the historic railroad and highway. The preferred alternative would not physically affect the historic or prehistoric resources in the canyon, but would introduce a structural element next to the Merced River, altering the setting of the canyon. The preferred alternative would remove the temporary bridges and pavement along Incline Road (the former Yosemite Valley Railroad) after construction. The resulting effect to the outstandingly remarkable value of cultural and historical landscape would be a minimal long-term effect. Because State Route 140 is part of the historical landscape, any impacts would be reduced by the continuation of the historical function of the transportation system.

**Visual/Aesthetics** - For the approaching driver, the 760-foot-long rockshed/tunnel, Alternative R, along with its entrance walls would be a new element in the landscape. As the driver passes through the rockshed/tunnel, views of the outside scenery would be partially blocked. The blocking of the

outside scenery and the view of an exposed rockshed/tunnel wall by approaching drivers would decrease the visual quality from moderately high to moderate.

For river users and especially rafters, the 15- to 20-foot-high rockshed/tunnel walls would be very noticeable as the river flows toward and then passes by the roadway alignment. The benefit is that there would be no bridges to block views over the river. The visual quality would be reduced to moderately low.

For trail users, views of the rockshed/tunnel wall would be very similar to that of the river user, except that certain trees or other vegetation may obscure some portions of the wall. Given the presence of the exposed rockshed/tunnel wall, the visual quality would drop from moderately high to moderately low.

**Geology/Soils/Seismic/Topography** -The natural slopes above the preferred alternative, Alternative R, could produce rockfall. Alternative R would remove approximately 80,000 cubic yards of the rockslide talus.

For Alternative R, the bedrock may be cut and excavated by using blasting equipment such as hydraulic splitters and hoe rams. The cut and fill slopes for Alternative R would not be erosive because the bedrock exposed during excavation is made of hard phyllite and chert.

Caltrans' standard practice is to design all structures for seismicity by establishing a Maximum Credible Earthquake. The maximum credible earthquake is established by using correlations between fault lengths, displacement, and area and earthquake magnitudes. Earthquake acceleration for a particular site is also analyzed by comparing three parameters: the maximum credible earthquake, the peak historical acceleration, and the distance from the site to the fault. The Silver Lake fault would produce the highest earthquake acceleration at the project area, and that acceleration is not considered very strong. Alternatives R may be built within or next to topographic features adjacent to the Ferguson rockslide that may be dormant rockslides. Groundwater could be encountered during the blasting and drilling of the rockshed for Alternatives R.

#### **Biological Resources - Threatened and Endangered Species**

*Merced Clarkia* - Alternatives R will cut into the slope on the south side of the river where unconfirmed observations of Merced clarkia have been made. Although no confirmed sightings were made, the project area is considered potential habitat. Alternatives R will potentially affect 2.10 acres of habitat.

*Limestone Salamander* - Alternatives R will remove 2.10 acres of limestone salamander habitat and may result in a take of the salamanders as defined in the California Endangered Species Act. Take could result from changes in above- and below-ground hydrology and blasting and excavating activities.

Overriding considerations that support approval of this recommended project are as follows:

The first rockslides within the Merced River Canyon began on April 29, 2006. Since April 2006, rockslides have damaged and blocked a portion of State Route 140 between Mariposa and El Portal. The Ferguson rockslide closed State Route 140 to traffic from 8 miles east of Briceburg to 7.6 miles west of El Portal.

The purpose of the project is to reopen and restore full highway access between Mariposa and El Portal via State Route 140. Full highway access for this portion of State Route 140 means a two-lane, all-weather highway that would accommodate all types of vehicles with some restrictions on vehicle length. The route would return to its previous status as a California Legal Advisory Truck Route with a 32-foot kingpin-to-rear-axle restriction. Other length restrictions include: 45 feet for single vehicle, 60 feet for a combination vehicle, and 35 feet for a towed vehicle from hitch to rear bumper. Currently, motorists use a temporary, one-lane bypass route to avoid the portion of State Route 140 that was closed by the Ferguson rockslide. This bypass route restricts vehicles over 45 feet total length from traveling along State Route 140. It also requires that traffic stop and queue before entering the one-lane bypass route when the traffic signal indicates the way is clear. Restoration of State Route 140 would eliminate the detour and provide full access to all traffic on State Route 140 between the town of Mariposa and Yosemite National Park. Yosemite National Park and communities in Mariposa County rely heavily on this access for many types of transportation that serve tourism and residents of the area. State Route 140 is an essential link in supplying goods and services to the Mariposa, El Portal and Yosemite communities.

Communities in the affected area include Mariposa, Midpines, and Briceburg on the west side of the rockslide, and Yosemite Village and El Portal on the east side of the rockslide. Currently, motorists must use a temporary one-lane detour route to bypass the section of State Route 140 that was blocked and damaged by the Ferguson rockslide. The project is needed because access to Yosemite National Park and the community of El Portal has been severely restricted, resulting in significant economic losses to those areas and the surrounding community. The reduction in tourist travel through the county resulted in the Governor declaring a State of Emergency for Mariposa County.

State Route 140 is an important all-weather transportation link to Yosemite National Park. It is also a school bus route allowing children in El Portal and Yosemite National Park to attend school in Mariposa.

When the highway was initially closed, an estimated 2.5 hours were added to a one-way trip between Mariposa and Yosemite or El Portal. Mariposa residents working in Yosemite Valley, for example, saw their commutes become as much

as 90 miles longer each way. Motorists who would have used State Route 140 had to travel on either State Route 41 or 120, routes that are harder to maneuver with larger vehicles. These alternate routes require motorists to drive longer distances and to do so in harsh weather conditions during winter. When the temporary detour opened in August 2006, travel time for vehicles less than 28 feet long decreased substantially, but motorists could still expect delays up to 15 minutes in either direction by a stoplight that controls one-way traffic on the single-lane detour.

A new, longer-term temporary solution involved construction of two additional bridges across the Merced River on a skewed alignment next to the existing temporary bridges. The first set of bridges placed in August 2006 were removed. With the new temporary bridges completed, June of 2008, vehicles up to 45 feet long were once again able to use the highway. Traffic was still controlled through this new single-lane detour by signals. However, the structures supporting the temporary bridges have a predicted lifespan of about 10 years and will ultimately require removal whether a permanent solution is provided or not. Should the structures reach the end of their useful life before a permanent solution is in place, their necessary removal would lead to the closure of State Route 140 at the section damaged by the rockslide. The temporary bridges sit within the 20-year flood zone and are not expected to withstand flood levels similar to those that occurred in the area in years past.

As the temporary closure of the highway in 2006 proved, a permanent closure of State Route 140 would negatively affect Mariposa County and Yosemite National Park. Such a closure would make the delivery of goods and services, as well as the arrival and departure of tourists, more difficult and time-consuming. Local residents who live on one side of the slide area and work on the other side would experience much longer and more dangerous commutes. State Route 140 is essential in supporting the Mariposa County and Yosemite communities.

Caltrans proposes to restore full highway access between Mariposa and Yosemite via State Route 140 in Mariposa County, California, by repairing the portion of State Route 140 that was blocked and damaged by the Ferguson rockslide.

The existing detour was constructed during a declared emergency and was designed as a temporary solution to the closure of State Route 140. Caltrans has an agreement with the U.S. Forest Service that the pavement and structures used for the detour would be removed once a permanent solution could be constructed. Removing these structures and returning Incline Road to its pre-emergency condition are part of the proposed action. The total length of the project area is 0.7 mile.

## FINDINGS

### CALIFORNIA DEPARTMENT OF TRANSPORTATION FINDINGS FOR FERGUSON SLIDE PERMANENT RESTORATION PROJECT 10-MPA-140-PM 42.0/42.7

The following information is presented to comply with State CEQA Guidelines (Title 14 California Code of Regulations, Chapter 3, Section 15901) and the Department of Transportation and California Transportation Commission Environmental Regulations (Title 21, California Code of Regulations, Chapter 11, Section 1501). Reference is made to the Final Environmental Impact Report (FEIR) for the project, which is the basic source for the information.

The following effects have been identified in the EIR as resulting from the project. Effects found not to be significant have not been included.

#### Human Environment:

##### Adverse Environmental Effects:

**Wild and Scenic Rivers (Wildlife)** – Suitable limestone salamander habitat and the presence of this species occur on the southern slope next to the existing State Route 140. Completion of the preferred alternative would directly remove 2.10 acres of limestone salamander habitat and likely cause a take of the species, resulting in short-term effect from construction. Long-term indirect effect of habitat fragmentation may also result from habitat isolation.

**Wild and Scenic Rivers (Cultural and Historical Landscape)** – The historic and prehistoric sites within the project area along with the ethnographic features are part of the unique historic context of the Merced River Canyon. Little change has occurred to the setting of the canyon since the construction of the historic railroad and highway. The preferred alternative would not physically affect the historic or prehistoric resources in the canyon, but would introduce a structural element next to the Merced River, altering the setting of the canyon. The preferred alternative would remove the temporary bridges and pavement along Incline Road (the former Yosemite Valley Railroad) after construction. The resulting effect to the outstandingly remarkable value of cultural and historical landscape would be a minimal long-term effect. Because State Route 140 is part of the historical landscape, any impacts would be reduced by the continuation of the historical function of the transportation system.

#### Findings:

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Statement of Facts:

**Wild and Scenic Rivers (Wildlife)** – The preferred alternative, Alternative R, would require a 2081 Incidental Take Permit from the California Department of Fish and Wildlife. Under normal circumstances, this permit would not be issued because the limestone salamander is a fully protected species. Assembly Bill 1973 was passed in July 2012 to amend Section 5050 and add to Section 2081.9 of the California Fish and Game Code to allow a one-time-only authorization by the California Department of Fish and Wildlife to issue a 2081 permit to Caltrans for the purpose of this project. The project must begin construction on or before January 1, 2016, which is when the authorization ends.

A construction window will be established to prevent construction-related activities from occurring on the southern slope during the salamander's active season, December through March. Environmentally sensitive area fencing in the form of 5-foot orange plastic mesh as well as salamander protection fencing in the form of 24-inch sheet metal would be erected if construction-related activities must be pursued next to limestone salamander habitat and during this species' active season.

Alternative R will require off-site compensatory mitigation for impacts to the limestone salamander at an approximately 3 to 1 ratio as part of the 2081 permit.

**Wild and Scenic Rivers (Cultural and Historical Landscape)** – While the bedrock mortar sites are situated away from the location of construction activities, they will be protected during construction by designating the sites as environmentally sensitive areas. Before construction, a professionally qualified staff archaeologist will oversee the placement of environmentally sensitive area fencing around each site. A Native American monitor will also be present during establishment of the fencing. During construction, the archaeologist and a Caltrans construction liaison will regularly inspect the fencing to ensure that it is intact and the protected sites are undisturbed.

Alternative R will remove the existing detour pavement from the Yosemite Valley Railroad Grade (Incline Road) and restore it to its previous condition.

Visual/Aesthetics:

Adverse Environmental Effects:

For the approaching driver, the 760-foot-long rockshed/tunnel, Alternative R, along with its entrance walls would be a new element in the landscape. As the

driver passes through the rockshed/tunnel, views of the outside scenery would be partially blocked. The blocking of the outside scenery and the view of an exposed rockshed/tunnel wall by approaching drivers would decrease the visual quality from moderately high to moderate.

For river users and especially rafters, the 15- to 20-foot-high rockshed/tunnel walls would be very noticeable as the river flows toward and then passes by the roadway alignment. The benefit is that there would be no bridges to block views over the river. The visual quality would be reduced to moderately low.

For trail users, views of the rockshed/tunnel wall would be very similar to that of the river user, except that certain trees or other vegetation may obscure some portions of the wall. Given the presence of the exposed rockshed/tunnel wall, the visual quality would drop from moderately high to moderately low.

#### Findings:

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

#### Statement of Facts:

With implementation of avoidance, minimization, and/or mitigation measures, the visual impacts of the preferred alternative, Alternative R, will be reduced and will not result in substantial changes in scenic quality. The measures will further avoid affecting the designation of State Route 140 as a Scenic Highway. The following measures apply to the preferred alternative and would maintain the visual quality of the area if the project were built:

- Provide a landscape architect during construction as needed to oversee tree and native vegetation preservation, structural aesthetic applications, and replanting the project area.
- Round toes and tops of slopes to create a more natural appearance.
- Create a natural appearance to any rock outcropping exposed by construction and stain it to give a weathered look.
- Roughen new slopes to create the look of age.
- Apply erosion control to all disturbed slopes except rock outcroppings and prevent runoff into the river.
- Remove existing roadway paving, barriers, and other elements associated with unused portions of State Route 140.

- Where possible, salvage, stockpile, and replace topsoil and duff containing seeds and organic matter from affected areas. Where possible exposed slopes would receive a minimum of 4 inches of topsoil.
- Replace or add plant materials in specific areas, such as the tunnel entrances and removed temporary bridge footings, to visually mitigate for structure heights and cut slopes. Planting ratios shall be a minimum of 1:1, and species mix shall be developed in consultation with the U.S. Forest Service.
- Replant using native species and create natural-appearing patterns.
- Implement a minimum three-year plant establishment period during which supplemental irrigation would be provided to new plants where horticulturally appropriate.
- Restore Incline Road to its previous condition by removing all pavement and temporary bridge abutments.
- Design all visible exterior and interior portions of the rockshed or tunnel to be visually compatible with the natural setting of the State Route 140 corridor.
- Provide texture or pattern to tunnel entrances, and/or exposed walls or visible to drivers and recreational users of the river canyon.
- Use colors on structures that blend into the surroundings.
- Use darkened metal elements or non-reflective surfaces for guardrails and posts.
- Bury culverts when possible, and add color or texture to any exposed sections to fit the landscape.

### **Geology/Soils/Seismic/Topography:**

#### **Adverse Environmental Effects:**

The natural slopes above the preferred alternative, Alternative R, could produce rockfall. Alternative R would remove approximately 80,000 cubic yards of the rockslide talus.

For Alternative R, the bedrock may be cut and excavated by using blasting equipment such as hydraulic splitters and hoe rams. The cut and fill slopes for Alternative R would not be erosive because the bedrock exposed during excavation is made of hard phyllite and chert..

Caltrans' standard practice is to design all structures for seismicity by establishing a Maximum Credible Earthquake. The maximum credible earthquake is established by using correlations between fault lengths, displacement, and area and earthquake magnitudes. Earthquake acceleration for

a particular site is also analyzed by comparing three parameters: the maximum credible earthquake, the peak historical acceleration, and the distance from the site to the fault. The Silver Lake fault would produce the highest earthquake acceleration at the project area, and that acceleration is not considered very strong. Alternatives R may be built within or next to topographic features adjacent to the Ferguson rockslide that may be dormant rockslides. Groundwater could be encountered during the blasting and drilling of the rockshed for Alternatives R.

#### Findings:

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

#### Statement of Facts:

With use of the blasting equipment mentioned above, the rock material being excavated will be controlled to prevent the spread of rock material, limit ground vibrations, and limit noise.

The entrances for Alternatives R will be built at least 150 feet away from the flanks of the rockslide. Placing the entrances at this location would provide adequate distance for more rockfall debris to accumulate without spilling onto the highway and blocking the rockshed. When the entrances are built, the slopes would be cut at a 1:4 ratio. A catchment area at-grade, rockfall barriers, or a combination of the two will be required for the preferred alternative to protect the roadway from the possibility of falling rock.

#### Biological Resources:

##### Adverse Environmental Effects:

##### **Threatened and endangered Species**

*Merced Clarkia* - Alternatives R will cut into the slope on the south side of the river where unconfirmed observations of Merced clarkia have been made. Although no confirmed sightings were made, the project area is considered potential habitat. Alternatives R will affect 2.10 acres of habitat.

*Limestone Salamander* - Alternatives R will remove 2.10 acres of limestone salamander habitat and will result in a take of the salamanders as defined in the California Endangered Species Act. Take could result from changes in above- and below-ground hydrology and blasting and excavating activities.

Findings:

Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Statement of Facts:

*Merced Clarkia* – Although this plant was not observed during surveys, pre-construction surveys will be done in the appropriate bloom period within the year before construction to provide updated data. If the Merced clarkia is observed, environmentally sensitive area fencing will be placed around the population to protect it to the maximum extent possible. The California Department of Fish and Wildlife will be notified if the plant is observed. If the plants cannot be completely avoided, Caltrans will request a Section 2081 Individual Take Permit.

*Limestone Salamander* - A construction work window will be established during initial ground disturbance activities to prevent construction-related activities from occurring on the southern slope during the salamander's active season, which is defined as December through March. Environmentally sensitive area fencing in the form of 5-foot orange plastic mesh as well as salamander exclusion (protection) fencing in the form of 24-inch sheet metal would be erected if construction-related activities were to occur next to limestone salamander habitat and during their active season.

Alternatives R will require a 2081 Incidental Take Permit from the California Department of Fish and Wildlife. Under normal circumstances, the California Department of Fish and Wildlife would not have the ability to issue a 2081 Incidental Take Permit for impacts to a fully protected species. However, Assembly Bill (AB) 1973 amended Section 5050 and Section 2081.9 of California Fish and Game Code to allow a one-time only authorization by the California Department of Fish and Wildlife to issue a 2081 Incidental Take Permit to Caltrans for the purposes of this project. AB 1973 was passed by the Assembly and Senate, and signed by the Governor on July 12, 2012.

Alternatives R will require off-site compensatory mitigation at approximately a 3 to 1 ratio as part of the 2081 Incidental Take Permit. Caltrans will purchase property that will have specific habitat elements indicative of limestone salamander presence. The parcel will likely be near the existing Limestone Salamander Ecological Reserve that is currently owned and managed by the California Department of Fish and Wildlife. Ownership and management could go to the California Department of Fish and Wildlife or to a non-profit land management organization such as the Sierra Foothill Conservancy. An endowment will also be required to cover the initial costs of management as well as long-term and recurring costs, and will accompany the property to be managed according to requirements in the 2081 Incidental Take Permit. The details of the plan will be proposed to California Department of Fish and Wildlife for review and approval in the 2081 Incidental Take Permit application.