Initial Study/
Mitigated Negative Declaration

for the

Northside Bicycle Path Project

CEQA Lead Agency
El Dorado County
2850 Fairlane Court
Placerville, CA 95667

October 2008

Table of Contents

List of Figures

List of Tables

Appendices

1 Introduction

The El Dorado County Department of Transportation is proposing the development of an approximate 2-mile bicycle and pedestrian adjacent to the west side of Highway 49 and the north side of Highway 193 (see **Figure 1** following Page 8). The County has prepared this Initial Study to consider the potential for the project to result in one or more significant impacts to the environment pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Section 21000, et seq.). The County is the CEQA lead agency for the project and this document has been prepared based on the requirements of the state CEQA Guidelines (14 California Administrative Code, Section 14000 et seq.). The Federal Highway Administration (FHWA), with assistance from Caltrans, is the NEPA lead agency for the project.

1.1 California Environmental Quality Act

This document is an Initial Study/ Mitigated Negative Declaration (IS/MND) prepared in accordance with CEQA, Public Resources Code §21000 et seq., and the State CEQA Guidelines, Title 14 California Code of Regulations (CCR) Section 15000 et seq. The purpose of this IS/MND is to: (1) determine whether project implementation would result in potentially significant or significant effects to the environment, and (2) incorporate mitigation measures into the project design, as necessary, to eliminate the project's potentially significant or significant project effects or reduce them to a less-than-significant level. An IS/MND presents the environmental analysis and substantial evidence supporting its conclusions regarding the significance of environmental impacts. Substantial evidence may include expert opinion based on facts, technical studies, or reasonable assumptions based on facts. An IS/MND is not intended nor required to include the level of detail used in an environmental impact report (EIR).

CEQA requires that all state and local government agencies consider the environmental consequences of projects they propose to carry out, or over which they have discretionary authority, before implementing or approving those projects. As specified in State CEQA Guidelines §15367, the public agency that has the principal responsibility for carrying out or approving a project is the lead agency for CEQA compliance. El Dorado County has principal responsibility for carrying out the proposed project and is therefore the CEQA lead agency for this IS.

As specified in State CEQA Guidelines §15064(a), if there is substantial evidence (such as the results of an initial study) that a project, either individually or cumulatively, may have a significant effect on the environment, the lead agency must prepare an EIR. The lead agency may instead prepare a negative declaration if it determines there is no substantial evidence that the project may cause a significant impact on the environment. The lead agency may prepare a MND if, in the course of the initial study analysis, it is recognized that the project may have a significant impact on the environment but that implementing specific mitigation measures (i.e., incorporating revisions into the project) would reduce any such impacts to a less-than-significant level (State CEQA Guidelines

§15064[f]). Based on the results of this Initial Study, the County has determined that the project could have a significant effect on the environment, but mitigation has been identified that would reduce impacts to less than significant. Therefore, with a commitment to implement the mitigation measures identified herein, the County may complete the project CEQA review with a Mitigated Negative Declaration (MND).

1.2 Document Organization

This document is divided into the following sections:

- **Section 2, Initial Study Findings**—Provides the County's CEQA findings pursuant to this Initial Study;

- **Section 3, Project Description**—Provides a detailed description of the project;

- **Section 4, Initial Study Checklists and Supporting Documentation**—Provides CEQA Initial Study resource impact checklists and supporting documentation; and

- **Section 5, Supporting Information Sources**—Provides a listing of sources of information used for the preparation of this document.

- **Appendix A, Mitigation Monitoring Plan**—Contains the Mitigation Monitoring Plan prepared for the proposed project. The Mitigation Monitoring Plan includes a list of required mitigation measures and includes information regarding the County's policies and procedures for implementation and monitoring of the mitigation measures.

2 Initial Study Findings

1. **Project Title:**
   Northside Bicycle Path Project
2. **Lead agency name and address:**
   El Dorado County, Department of Transportation
   2850 Fairlane Court
   Placerville, CA 95667
3. **Contact person and phone number:**
   Jennifer Maxwell (530) 621-5987
4. **Project location:**
   The project is located in the community of Cool, adjacent to Highway 49 and Highway 193. (See **Figure 1** in **Section 3** of this Initial Study)
5. **Project sponsor's name and address:**
   N/A
6. **General Plan designation:**
   El Dorado County General Plan: Open space, Commercial, Medium Density Residential and Multi-Family Residential (Rural Center)
7. **Pre-zoning:**
   N/A
8. **Description of project:**
   The proposed project involves the development of an approximate 2-mile segment of Class I bicycle trail adjacent to the west side of Highway 49 and the north side of Highway 193 in the community of Cool. The proposed project would include paving the trail alignment and development of two retaining walls within the project area. A more detailed project description is included in **Section 3** of this Initial Study. **Figure 2** in **Section 3** shows the project area and proposed improvements.

9. Surrounding land uses and setting:

The project area is located within the community of Cool in northwestern El Dorado County. The project area is located approximately 3 miles east of the town of Auburn and Interstate 80 (I-80) (**Figure 1**). Adjacent land use designations as identified in the El Dorado County General Plan are comprised primarily of open space, commercial, medium-density residential and multi-family residential uses.

Additional information concerning surrounding land uses within and adjacent to the project area is included **Section 3** of this Initial Study.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

The project may require permits or approvals from the following:

U.S. Army Corps of Engineers – Nationwide Section 404 Discharge Permit

California Department of Fish and Game – Lake/Streambed Alteration Agreement

Central Valley Regional Water Quality Control Board – General Permit for Discharges of Storm Water Associated with Construction Activity; Water Quality Certification

California Department of Transportation – Encroachment Permit

El Dorado County Air Quality Management District – Dust Mitigation Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
This Initial Study has determined that in the absence of mitigation the proposed project would have the potential to result in significant impacts associated with the factors checked below. Mitigation measures are identified in this Initial Study that would reduce all potentially significant impacts to less-than-significant levels.

	Aesthetics		Agricultural Resources	3	Air Quality
3	Biological Resources	3	Cultural Resources		Geology/Soils
	Hazards & Hazardous Materials		Hydrology/Water Quality		Land Use/Planning
	Mineral Resources		Noise		Population/Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities/Service Systems		Mandatory Findings of Significance		

INITIAL STUDY DETERMINATION:
On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
✓	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

Name and Title: Janet Postlewait, Principal Planner

Department of Transportation

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3 Project Description

3.1 Project Location and Land Use Designations

The Northside Bicycle Path Project is in the community of Cool, California, located in northwestern El Dorado County (see **Figure 1**). The project area is located approximately three miles east of the town of Auburn and is adjacent to Highway 49 from Cave Valley Road north to the Highway 49/193 intersection and adjacent to Highway 193 from the Highway 49/193 intersection east to American River Trail (see **Figure 2**).

Cool, California is designated as a Rural Center in the 2004 *El Dorado County General Plan*. Rural Centers are areas in which commercial and planned higher-density residential development is predominant. Designated land uses adjacent to the project area include open space, commercial, medium-density residential and multi-family residential. Commercial development is located on the southwest corner of the Highway 49/193 intersection, while much of the remainder of the project area is surrounded by single-family residential development.

3.2 Project Purpose and Need

Bicycle and pedestrian travel within the community of Cool is limited to travel along the shoulders of both Highway 49 and Highway 193. Development of the proposed Class I bicycle path would encourage alternative methods of transportation and provide a safe travel route for bicyclists and pedestrians by removing them from the shoulders of Highway 49 and Highway 193. By providing a safe pedestrian and bicycle route to Northside Elementary School, the proposed project would encourage children to ride their bicycles or walk to school. The proposed project would connect the vital community centers of Northside Elementary School, the Holiday Market commercial center and Auburn Lake Trails Subdivision.

3.3 Proposed Improvements

3.3.1 Project Features

The project proposes to construct a Class I bicycle path adjacent to the west side of Highway 49 from Cave Valley Road north to the Highway 49/193 intersection and adjacent to the north side of Highway 193 from the Highway 49/193 intersection to American River Trail (see **Figure 2**). The portion of the proposed trail adjacent to Highway 49 would provide a north-south access route for bicycle and pedestrian uses and would be approximately one mile in length, with a minimum width of eight feet to accommodate heavy bicycle use and significant pedestrian use as recommended in Caltrans Highway Design Manual. The proposed trail would be flanked by a two-foot shoulder on the east side of the trail (closest to Highway 49) and a four-foot shoulder on the west side of the trail.

The Class I bicycle path would continue east adjacent to the north side of Highway 193 to American River Trail. The portion of the Class I bicycle path adjacent to Highway 193 would be approximately one mile in length, with a minimum width of eight feet for the paved trail (pursuant to the minimum requirement of the Caltrans Highway Design Manual). Within the segment adjacent to Highway 193, a two-foot shoulder would be developed on the south side of the trail (closest to Highway 193) and a four-foot shoulder would be developed on the north side of the bicycle path.. The proposed Class I bicycle path would be constructed with a minimum of five feet from the shoulders of Highway 49 and Highway 193 along the west and north sides, respectively.

The project proposes to develop two retaining walls within the project area. The retaining walls would be standard (Caltrans) Type I retaining walls and would not exceed 15 feet in height. The retaining wall along Highway 49 would be approximately 534 feet long, while the retaining wall along Highway 193 would be approximately 575 feet long.

3.3.2 Pedestrian Facilities

Currently, there are no existing crosswalk or sidewalk facilities within the project area. The bicycle path would be a multi-use facility for bicycle and pedestrian use. The proposed project would include development of crosswalk striping at the Highway 49/193 intersection, which currently operates as an all-way stop signed intersection. The proposed project does not include modifications to the existing safety lighting at the Highway 49/193 intersection.

3.3.3 Utilities

No overhead utility poles nor any underground utility relocation would be required by the proposed project. Coordination with the appropriate utility service provider would be conducted if needed prior to any utility relocation to minimize utility service disruption.

3.3.4 Drainage Facilities

Onsite drainage modification for the Proposed Project would include the extension of an existing cross culvert for Knickerbocker Creek (along Highway 49) and an existing cross culvert located along Highway 193 immediately across from Cherry Acres Road. The culvert along Highway 49 is located approximately 1,900 feet north of Cave Valley Road. The culvert would be extended approximately 14 feet to the west of the existing culvert's terminus to accommodate the bicycle path crossing at Knickerbocker Creek. The culvert along Highway 193 would be extended approximately 10 feet to the north of the existing culvert's terminus to accommodate the bicycle path crossing.

Existing drainage ditches located along the west side of Highway 49 and the north side of Highway 193 would be removed with the development of the bicycle path and would be replaced with underground storm drainpipes. The proposed drainpipes would run parallel to Highway 49 and Highway 193 (as applicable) and would be located along the

southeast corner of the intersection. Approximately 600 feet of 22-inch underground storm drainpipes are proposed for the project.

Additional drainage facilities along the project would conform to Caltrans Highway Design Manual specifications, as needed.

3.3.5 Tree Removal and Revegetation

Development of the proposed project would require the removal of one pine tree located adjacent to Highway 193. In the event that construction activities and development of the proposed project require additional tree removal, Section 4.4 of this IS/MND provide further discussion. The path construction would also require vegetation removal along the project alignment. Plants selected for revegetation would be compatible with the flora of the project area and would not include any noxious or invasive weeds.

3.3.6 Signage

Signage and striping would be limited to warning signs and striping at vehicle crossings (located at the trail's intersections with the private driveways in the project area and at the proposed crosswalks at the Highway 49/193 intersection) and at the proposed trail termini. Signage, alerting motorists of bicycle crossings, would be installed approximately two feet from the edge of the proposed trail pavement.

Existing roadway signage located within the project area would be relocated. Signage and striping within the project area would be installed in accordance with the Caltrans Design manual.

3.3.7 Access Across Private Driveways

The proposed bicycle path alignment traverses several private driveways. The proposed alignment would be designed to ensure the trail would be developed at the existing grade of the existing driveways. As discussed above, signage would be installed adjacent to the residential accesses (within Caltrans right-of-way) to alert motorists of bicycle crossings.

3.3.8 Right-of-Way Requirements

No right-of-way acquisition would be required for the proposed project. All construction would be completed within Caltrans right-of-way for Highway 49 and Highway 193.

3.3.9 Project Construction

The El Dorado County DOT will retain a construction contractor to construct the proposed improvements and the contractor would be responsible for compliance with all applicable rules, regulations and ordinances associated with construction activities and for actual implementation of the construction-related mitigation measures to be adopted

for the project. DOT will provide construction contractor oversight and management and will be responsible for verifying mitigation measure implementation. The Proposed Project will be constructed in accordance with the Public Contracts Code of the State of California, the State of California Department of Transportation Standard Plans and Standard Specifications, and the Contract, Project Plans, and Project Special Provisions under development by the County of El Dorado Department of Transportation. The general public would be precluded from access to the trail during construction activities. The following are a combination of standard and project-specific procedures/requirements applicable to project construction:

- Construction contract special provisions will require that a traffic management plan be prepared. The traffic management plan will include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic during construction. Minor traffic stoppages or delays may be allowed if necessary during project construction. Full roadway closures will be avoided during project construction and provisions for emergency vehicle movement through the project area will be provided at all times during construction;
- Contract special provisions will require compliance with EDCAQMD Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos;
- Compliance with the California Air Resources Board Airborne Toxic Control Measure at Title 17 Section 93105 addressing Construction, Grading, Quarrying, and Surface Mining activities and with the Asbestos ATCM for Surfacing Applications (California Code of Regulations, Title 17, Section 93106);
- Contract provisions will require notification of DOT and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.94 et seq., regarding the discovery and disturbance of human remains should any human remains be discovered during project construction;
- Contract provisions will require compliance with the El Dorado County Grading Ordinance and Storm Water Management Plan for Western El Dorado County and implementation of Best Management Practices as identified in the National Pollutant Discharge Elimination System permit and/or Storm Water Management Plan;
- DOT or its construction contractors will conduct early coordination with utility service providers, law enforcement and emergency service providers to ensure minimal disruption to service during construction;
- DOT and its construction contractors will comply with the State of California Standard Specifications (May 2006), written by the State of California Department of Transportation, for public service provision;
- Access to adjacent residential properties will remain open at all times during the construction period; and

- The project would comply with General Plan Policy 6.5.1.11 pertaining to construction noise.

3.3.10 Construction Schedule

Construction of the Proposed Project is proposed to commence in 2009[1] and would require approximately six months to complete the proposed segment adjacent to Highway 49 and six months to complete the proposed segment adjacent to Highway 193. Each segment would be constructed during different non-rainy (i.e., May to October) seasons.

3.4 Permits and Regulatory Approvals

Table 3-1 provides a preliminary listing of the potential permits or other regulatory approvals that may be required for the project.

[1] Note that commencement of construction activities is dependent upon available funding.

Table 3-1. Potential Permits and Regulatory Approvals Required for the Project

Approving Agency	Required Permit/Approval	Required For
Federal Agencies		
Army Corps of Engineers	**Nationwide Section 404 Discharge Permit.** (Clean Water Act, 33 USC 1341)	Discharge of dredge/fill material into "Waters of the United States," including wetlands.
U.S. Fish and Wildlife Service	**Biological Opinion.**	Minimization of impacts to listed species.
State Agencies		
State Water Resources Control Board, Regional Water Quality Control Board	**General Construction Activity Storm Water Permit**. **Notice of Intent**. (40 CFR Part 122)	Storm water discharges associated with construction activity.
	National Pollutant Discharge Elimination System Permit. (Clean Water Act, 33 USC 1251 *et seq.*)	For storm water discharges associated with industrial activity, unless covered by individual NPDES permit.
	Waste Discharge Requirements. (Water Code 13000 *et seq.*)	Discharge of waste that might affect groundwater quality.
	Water Quality Certification (Clean Water Act), if project requires Army Corps of Engineers 404 permit.	Discharge into "Waters of the U.S.," including wetlands (see Army Corps of Engineers Section 404 Permit above).
Department of Fish and Game	**Lake/Streambed Alteration Agreement**. (Fish and Game Code 1603)	Change in natural state of river, stream, lake (includes road or land construction across a natural streambed) which affects fish or wildlife resource.
California Department of Transportation	**Encroachment Permit**	Activities within Caltrans right-of-way
Local Agencies		
El Dorado County Air Quality Management District	**Dust Mitigation Plan**	Minimization of construction emissions associated with construction of the proposed project.

4 Initial Study Checklists and Supporting Documentation

The resource-specific checklists and supporting discussion have been prepared based on the review of the project area and existing site conditions, review of relevant literature (as cited herein), consideration of the design plans for the proposed project, and discussions with County staff and agencies.

The following provides issue-specific checklists identifying the project's potential to result in significant impacts. Each checklist is followed by a description of the environmental setting within the project area relevant to the issues in each checklist and a discussion of each environmental issue/question in the checklist.

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4.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

4.1.1 Environmental Setting

The project area includes areas adjacent to Highway 49 from Cave Valley Road to Highway 193 and areas adjacent to Highway 193 from Highway 49 to American River Trails. Areas adjacent to and within the project area are comprised primarily of ruderal roadside vegetation; however, the project alignment also traverses oak savanna, riparian woodland, annual grassland, and disturbed lands. No unique scenic resources or notable vistas are present within the project area.

4.1.2 Potential Environmental Effects

a) *Would the project have a substantial adverse effect on a scenic vista?*

No Impact. The proposed project would result in a relatively minor physical change to the visual characteristics of the immediate project area. The trail alignment would be paved, which would result in a modified visual character. The proposed project includes installation of signage, which would be designed to be visible, yet with a color and design that seeks to be non-intrusive to the visual setting. The proposed features would result in a slight noticeable change in the character; however, there are no identified scenic vistas within or in the vicinity of the project site, and therefore, the proposed project would have no substantial adverse effects on a scenic vista.

b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Impact. Highway 49 throughout El Dorado County is classified as an "Eligible State Scenic Highway – Not Officially Designated". The nearest scenic highway designation is on U.S. 50 between and within the City of Placerville and the Tahoe Basin. This designation occurs approximately 16 miles southeast of the proposed project area. The project area would not be visible from the scenic highway, therefore, the project would not affect aesthetic resources within the proximity of a State scenic highway.

c) *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

Less Than Significant. As discussed in response a) above, the project would result in a relatively minor physical change to the visual characteristics of the immediate project area. The proposed project includes paving of the project alignment, installation of signage, the removal of existing vegetation, and installation of two retaining walls (one adjacent to the Highway 49 segment of the trail and one adjacent to the Highway 193 segment of the trail). The retaining walls would be designed to be of similar color to its surroundings to be compatible with the existing visual character of the project area.

As discussed in Section 3.3.5, tree removal is not anticipated; however, removal of vegetation would result in the need for revegetation of areas not paved during construction. Plants selected for revegetation would be appropriate for the project area and would not include any noxious or invasive weeds.

Signage would be designed to be visible, yet with a color and design that seeks to be non-intrusive to the visual setting. The proposed features would result in a slight noticeable change in the character; however, the addition of the proposed project features is not anticipated to substantially degrade the visual quality of the project area and this impact is therefore considered less than significant.

d) *Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

No Impact. The proposed project does not include the development and installation of lighting features nor the modification of existing features; therefore, the project would not introduce substantial new sources of light and glare, or adversely affect nighttime views in the project area.

4.2 Agricultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion				✓

4.2.1 Environmental Setting

The California Department of Conservation Farmland Mapping and Monitoring Program "Important Farmland in California, 2004" map identifies the project area with classifications of "Non-Irrigated Farmland", "Grazing Land" and "Other Land". No *Prime Farmland, Unique Farmland, or Farmland of Statewide Importance* or lands under Williamson Act contracts are present within the project area.

Although the primary use of several of the parcels immediately adjacent to the project area has been identified as "Two-Acre Residential" and "General Commercial", none of the parcels immediately adjacent to the project area are zoned "Agricultural Lands". Additionally, based on the *El Dorado County Agricultural Preserves Map* (2005) there are no Agricultural Preserves within or adjacent to the project area.

4.2.2 Potential Environmental Effects

a) *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the*

Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. No *Prime Farmland, Unique Farmland, or Farmland of Statewide Importance* would be affected by the project.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. No lands either zoned for agricultural uses or subject to a Williamson Act contract exist within or adjacent to the project area. The proposed project would not disrupt agricultural activities, and does not conflict with existing zoning for agricultural use or a Williamson Act contract.

c) *Would the project involve other changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use?*

No Impact. No farmland is present within the project area, and the project would not result in or create a situation that would contribute to conversion of farmland to a non-agricultural use.

4.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d) Expose sensitive receptors to substantial pollutant concentrations?		✓		
e) Create objectionable odors affecting a substantial number of people?			✓	

4.3.1 Environmental Setting

The project area is located within the Mountain Counties Air Basin (MCAB) and under the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD). The San Francisco Bay Area Air Basin and the Sacramento Valley Air Basin lay to the west, and the San Joaquin Valley Air Basin is located to the south.

Air Pollutant Sources and Ambient Air Quality

The EDCAQMD regulates air quality through its permit authority for most types of stationary emission sources, and through its planning and review activities for other sources.

Federal and California ambient air quality standards have been established for the following five critical pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

Sources of Pollutants

In general, there are five major sources of air pollutant emissions in the air basin, including motor vehicles, industrial plants, agricultural activities, construction activities, and residential burning activities. Motor vehicles account for a significant portion of regional gaseous and particulate emissions. Industrial facilities can also generate substantial gaseous and particulate emissions. In addition, construction, agricultural activities, and the burning of wood in fireplaces for residential heat can generate significant temporary gaseous and particulate emissions (dust, ash, smoke, etc.).

Ozone

Ozone pollution is the most conspicuous type of air pollution, and is often characterized by visibility-reducing haze, eye irritation, and high oxidant concentrations (i.e., "smog"). Ozone is a pollutant of particular concern in El Dorado County and in the Sacramento Valley. Ozone, which is classified as a "regional" pollutant, often afflicts areas downwind of the original source of precursor emissions. Ozone is produced in the atmosphere through photochemical reactions involving reactive organic compounds (ROG) and nitrogen oxides (NO_X). Numerous small sources throughout the region are responsible for most of the ROG and NO_X emissions in the Basin. Ozone can be easily transported by winds from a source area. Winds from the west transport ozone from the Bay Area and the Sacramento Valley Air Basin to the Sierra Nevada foothills. Ozone precursor transport depends on daily meteorological conditions. In the summer, air flowing into the Mountain Counties Air Basin from the Central Valley to the west transports ozone precursors and ozone generated in the Bay Area and the Sacramento and San Joaquin valleys into the MCAB. These transported pollutants predominate as the cause of ozone in the air basin and are largely responsible for the exceedance of the state and federal ozone standard in the air basin (El Dorado County Air Quality Management District, 2002).

Particulate Matter (PM)

Particulate matter is another pollutant of concern in the MCAB. Particulate matter less than 10 microns in diameter (PM_{10}) and less than 2.5 microns in diameter ($PM_{2.5}$) refers to substances that can be inhaled into lungs and can potentially cause serious health problems. Common particulate matter sources include construction and demolition activities, agricultural operations, burning, and diesel-fueled vehicle and equipment emissions.

Carbon Monoxide (CO)

Carbon monoxide (CO) is emitted primarily by motor vehicles. Non-reactive, ambient CO concentrations normally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are also influenced by meteorological factors such as wind speed and atmospheric mixing. High levels of CO can impair the transport of oxygen in the bloodstream and thereby aggravate cardiovascular disease and cause fatigue, headaches, and dizziness. CO may form high concentrations when wind speed is low.

Cold temperatures and calm conditions increase the likelihood of a climate conducive to high, localized CO concentrations.

Nitrogen Dioxide (NO_2)

The major sources of nitrogen dioxide (NO_2), essential to the formation of photochemical smog, are vehicular, residential, and industrial fuel combustion. NO_2 is the brown colored gas evident during periods of heavy air pollution. NO_2 increases respiratory disease and irritation and may reduce resistance to certain infections.

Sulfur Dioxide (SO_2)

The major source of sulfur dioxide (SO_2) is the combustion of high-sulfur fuels for electricity generation, petroleum refining, and shipping. In humid atmospheres, sulfur oxides can react with vapor to produce sulfuric acid, a component of acid rain. SO_2 can irritate the lungs, damage vegetation and materials, and reduce visibility.

Lead (Pb)

Gasoline-powered automobile engines are a major source of airborne lead, although the use of leaded fuel is being reduced. Lead can cause blood effects such as anemia and the inhibition of enzymes involved in blood synthesis. Lead may also affect the central nervous and reproductive systems. Ambient lead levels have dropped dramatically as the percentage of motor vehicles using unleaded gasoline continues to increase.

Naturally Occurring Asbestos (NOA)

NOA is known to be present within El Dorado County. Disturbance of serpentine or ultramafic rock has the potential to release NOA into the air. Serpentine rock does not pose a health risk unless it is disturbed in such a manner that causes asbestos-containing particulate matter to be released from the rock into the air creating a health risk. EDCAQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map which identifies those areas more likely to contain NOA. Ground disturbance activities within these areas are subject to additional County regulatory requirements to minimize human exposure potential. The project area is located within an area identified on the most recent *Naturally Occurring Asbestos Review Area Map* as being "More Likely to Contain Asbestos" and "Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line" (July 22, 2005).

Ambient Air Quality Standards

Applicable Federal and State standards for each regulated pollution category is provided in **Table 4 -1**.

Table 4-1
Federal and State Air Quality Standards

Pollutant	Averaging Time	Federal Standard	State Standard
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.08 ppm	--
Carbon Monoxide	1-Hour	35.0 ppm	20.0 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide	Annual	0.05 ppm	--
	1-Hour	--	0.25 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.05 ppm
	1-Hour	--	0.25 ppm
PM_{10}	24-Hour	150 µg/m^3	50 µg/m^3
$PM_{2.5}$	Annual	15 µg/m^3	--
	24-Hour	65 µg/m^3	--
Lead	30-Day Avg. Month Average	-- 1.5 µg/m^3	1.5 µg/m^3 --

ppm = parts per million
µg/m^3 = Micrograms per Cubic Meter

Source: Sacramento Metropolitan Air Quality Management District Guide to Air Quality Assessment, July 2004, with modification to reflect recent federal change in ozone standard

Federal Standards

The 1977 Federal Clean Air Act (CAA) required the U.S. Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for the six criteria air pollutants. (These are included in **Table 4-1**.)

In June of 1997, the EPA adopted new ozone and PM_{10} standards. The EPA has replaced its previous 1-hour ozone standard of 0.12 ppm and replaced it with an 8-hour standard of 0.08 ppm. The EPA also adopted an additional standard for $PM_{2.5}$.

Pursuant to the 1990 amendments to the Federal CAA, the EPA has classified air basins (or portions thereof) as either "attainment" or "non-attainment" for each criteria air pollutant, based on whether or not the NAAQS have been achieved. El Dorado County is designated as non-attainment for the federal ozone standard.

State Standards

In 1988, the State of California passed the California Clean Air Act (CCAA, State 1988 Statutes, Chapter 1568) that established more stringent State ambient air quality standards, and set forth a program for their achievement. The California Air Resources Board (CARB) implements State ambient air quality standards, as required in the CCAA, and cooperates with the Federal government in implementing pertinent federal requirements. Further, CARB has responsibility for reviewing and permitting stationary and mobile source air pollutant emissions throughout the state. Like its Federal counterpart, the CCAA designates areas as attainment or non-attainment, with respect to the state AAQS. Under the state AAQS and based on 2004 designations, El Dorado County is designated non-attainment for ozone and PM_{10}.

Two State of California regulations for asbestos control are applicable within El Dorado County and enforced by the EDCAQMD. These include (1) Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining Operations (California Code of Regulations, Title 17, Section 93105) and (2) Asbestos Airborne Toxic Control Measure for Surfacing Applications (California Code of Regulations, Title 17, Section 93106).

The California Global Warming Solutions Act of 2006 (AB 32) mandates significant reductions in greenhouse gases (GHG) by the year 2020; passage of that law has highlighted the need to consider the impacts of GHG emissions from projects that are subject to CEQA review. This bill charged the CARB to develop regulations on how the state would address global climate change due to GHG emissions. There are currently no thresholds or recommended methodologies for determining the significance of a project's potential cumulative contribution to global climate change in CEQA documents.

Local Standards

Local air quality regulations are established and regulated by the EDCAQMD. The EDCAQMD Board of Directors adopted amended and new fugitive dust rules on July 19, 2005. These rules would be applicable to the proposed project and include:

- Rule 223 Fugitive Dust – General Requirements
- Rule 223-1 Fugitive Dust – Construction Requirements
- Rule 223-2 Fugitive Dust - Asbestos Hazard Mitigation (if certain conditions are found to be present, this rule may apply)

The EDCAQMD rules listed above regulate fugitive dust (including that potentially containing NOA) generated by construction activities and require appropriate mitigation measures to reduce air quality impacts. The project will also be subject to AQMD Rule 224, which prohibits the use of "cutback asphalt", which is asphalt cement that has been liquefied by blending with petroleum solvents.

EDCAQMD's Guide to Air Quality Assessment (2002) specifies specific daily emissions thresholds that can be used to determine the significance of project emissions. Thresholds of significance for specific pollutants of concern are as follows:

- ROG: 82 lbs/day
- NO_x: 82 lbs/day
- CO: AAQS
- PM_{10}: AAQS

4.3.2 Potential Environmental Effects

The project would result in short-term, temporary air pollutant emissions from construction activities. Several of the checklist responses and discussion provided below are dependent upon potential impacts associated with construction emissions. As such, a discussion of construction emissions estimates and significance is provided here to serve as the basis for discussion that follows. Construction emissions were estimated for the project using the Sacramento Metropolitan Air Quality Management District's *Road Construction Emissions Model, Version 5.2* as recommended in the EDCAQMD *Guide to Air Quality Assessment*[2]. As shown in **Tables 4-2** and **4-3**, none of the criteria pollutants are anticipated to exceed the daily emissions thresholds and project-related construction emissions are therefore considered less than significant.

[2] Note that the Roadway Construction Emission Model can be used to assess the emissions of linear construction projects, as referenced at: http://www.airquality.org/ceqa/index.shtml.

Table 4-2. Estimated Construction Emissions

Project Phases	ROG (lbs/day)	CO (lbs/day)	NO_x (lbs/day)	PM_{10} (lbs/day)	*Exhaust PM_{10} (lbs/day)*	*Fugitive Dust PM_{10} (lbs/day)*
Grubbing/Land Clearing	10	40	44	13	*3*	*10*
Grading/Excavation	11	41	46	13	*3*	*10*
Drainage/Utilities/Sub-Grade	11	43	47	13	*3*	*10*
Paving	5	19	27	2	*2*	*0*
Maximum (pounds/day)	11	43	47	13	*3*	*10*
Significance Criteria	82	AAQS[1]	82	AAQS[1]	*N/A*	*N/A*
Significant	No	No[1]	No	No	*N/A*	*N/A*

Source: ESP, 2008

Notes:
[1] As noted in the EDCAQMD CEQA Guide, CO and PM_{10} Total Average Daily Emissions are calculated in lbs/day when using the Roadway Construction Emissions Model and must be converted to ambient concentrations. See **Table 4-3** for CO Concentration and Significance Determination.
Data entered to emissions model: Project Start Year: 2009; Project Length (months): 12; Total Project Area (acres): 6.3; Total Soil Imported/Exported (yd^3/day): 50. Miles per round trip for soil hauling activities: 30 miles; Number of round trips per day: 3.
PM_{10} estimates assume 50% control of fugitive dust from watering and associated dust control measures.
Total PM_{10} emissions are the sum of *exhaust* and *fugitive dust* emissions.
Source: Emissions estimated using Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 5.2

Table 4-3. Carbon Monoxide Concentration and Significance Determination

Concentration	1-Hour	8-Hour
Background Concentration	1.39	0.00
Project-Related Pollutant Concentration	1.1	1.1
Anticipated Total Concentration	2.49	1.1
Ambient Air Quality Standard[1]	20.0	9.0
Project Variance from AAQS	-17.51	-7.9
Significance Determination (Significant if project variance is positive)	No	No

Source: ESP, 2008

[1] The Ambient Air Quality Standard referenced in the table above, is the California AAQS, as it is more stringent than the federal AAQS (35.0 ppm).

Note: The above calculations assume project-related CO concentration levels associated with additional peak-hour trips are based on a conservative assumption that the project would result in 300 additional peak-hour trips during construction.

Chapter 4 of the EDCAQMD *Guide to Air Quality Assessment* references that average daily construction emissions for CO and PM_{10} must be converted from lbs/day to ambient concentrations for comparison to the AAQS. **Table 4-3** shows the calculations for CO

concentrations resulting from project construction activities. Though the modeling techniques described in the EDCAQMD Guide are intended for operation emissions calculations, the above conversions were utilized to determine the project's construction-related CO emission concentrations, as recommended in the Guide. As discussed in Chapter 6 of the EDCAQMD Guide, PM_{10} emissions associated with projects can be considered less than significant if the projects are below the established thresholds for ROG and NO_x emissions. Because ROG and NO_x emissions would be less than significant for the proposed project (as discussed above), it can be concluded that PM_{10} emissions would also be less than significant and PM_{10} conversion calculations were not evaluated.

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less Than Significant. The proposed project would result in temporary emissions of particulate matter, carbon monoxide, reactive organic compounds (ROG), and nitrogen oxides (NO_x) during construction as a result of ground disturbance activities and the operation of construction vehicles and equipment. These impacts would be minimal due to the limited nature of the project and short-term construction period and have been determined less than significant based on the information presented above. These short-term construction emissions are, therefore, not anticipated to affect applicable air quality planning.

Because the proposed project is intended for use by non-motorized transportation uses, no long-term (operational) impacts to air quality are expected. The project is consistent with all applicable air quality attainment plans.

b) *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant. El Dorado County is in non-attainment status for both federal and state ozone standards and for the state PM_{10} standard. Construction activities would result in short-term increases in emissions from the use of heavy equipment that generate dust, exhaust, and tire-wear emissions and from paints and coatings. As discussed above and presented in **Table 4-2**, project construction would create short-term increases in fugitive dust and both ROG and NO_x emissions from vehicle and equipment operation. Although the project area is designated non-attainment for PM_{10} and ozone, the PM_{10} and ozone precursor (ROG and NO_x) emissions estimated for the project have been determined to be less than significant based on EDCAQMD thresholds which have been developed in consideration of the region's air quality standards attainment status.

The proposed project would result in short-term construction emissions (including GHG emissions) that may contribute to global climate change. During the construction phase of the project, there is the potential to contribute to the generation of GHG emissions. El Dorado County adopted Resolution No. 29-2008, which

identifies the County's goals in regards to reduction in GHG emissions. The Resolution identifies a goal of promoting pedestrian and bicycle commuting, which would be accomplished by the proposed project. Although construction activities would result in short-term construction GHG emissions, the project would promote bicycle commuting in the long-term. Because the project would encourage bicycle use, this impact is considered less than significant.

c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

Less than Significant. Please refer to response b) above. While the project would generate short-term air quality impacts as a result of construction activities, because the proposed project would provide a non-motorized transportation use, the proposed project would not result in long-term or cumulatively considerable increases in air quality pollutant emissions for which El Dorado County is currently in non-attainment (ozone precursors, NO_x and ROG, and PM_{10}). The methodology and impact significance criteria for review of project-specific impacts associated with construction emissions considers the existing air quality of the project area and, as such, determines impact significance based on cumulative air quality considerations. The air pollutant emissions increase associated with construction activities was determined to be less than significant and would result in less than significant contributions to cumulative pollutant increases in the region.

d) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant with Mitigation Incorporation. "Sensitive receptors" for air pollutants are considered residences, schools, parks, hospitals, or other land uses where children or the elderly congregate, or where outdoor activity is the primary land use. The project area is primarily unpaved trail adjacent to existing roadway (Highway 49 and Highway 193) beyond which are residential and commercial uses. The nearest schools are adjacent to the southern terminus of the project area (Northside Elementary School and Cool Christian School). With the implementation of standard air quality emission abatement measures identified in Section 3 of this IS/MND, construction and operational activities associated with the proposed project are not anticipated to expose the school sites to substantial pollutant concentrations.

Approximately five residential structures are located within 400 feet of the existing 2-mile unpaved trail alignment. Currently, the closest residence to the project area is located approximately 350 feet west of the trail alignment. Adjacent residences have the potential to be exposed to pollutant concentrations. The proposed project could result in temporary emissions of particulate matter, carbon monoxide, ROG, and NO_x during construction as a result of ground disturbance activities and the operation of construction vehicles and equipment. These impacts would be less than significant due to the limited nature of the project and short-term construction period. No long-

term mobile source air pollutant emissions are anticipated to create substantial localized air pollutant concentrations.

The proposed project area is located within an area identified on the most recent Naturally Occurring Asbestos Review Area Map as being "More Likely to Contain Asbestos" (along Highway 193) and "Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line" (along Highway 49) (July 22, 2005).

The proposed project would have the potential to expose receptors to naturally occurring asbestos. As discussed in **Section 3.4.7**, the proposed project would be required to comply with EDCAQMD Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos; however, implementation of **Mitigation Measure 1** would ensure this impact would result in a less-than-significant impact.

Mitigation Measure 1. Earthwork performed within areas identified as "More Likely to Contain Asbestos" and "Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line" (as shown on Naturally Occurring Asbestos Review Area Map (July 22, 2005) shall be in accordance with Section 19 of the Standard Specifications and Section 19-910 of the 2006 Standard Special Provisions. In addition, a worker health and safety program shall be developed and implemented in accordance with all regulatory requirements, including California Occupational Safety and Health Administration requirements.

e) *Would the project create objectionable odors affecting a substantial number of people?*

Less Than Significant. Construction activities would involve the use of a variety of gasoline or diesel powered equipment that emit exhaust fumes and asphalt paving which has a distinctive odor during application. These emissions would occur intermittently throughout the workday and the associated odors are expected to dissipate rapidly within the immediate vicinity of the work area. Persons within proximity to the construction work area may find these odors objectionable. However, the limited number of receptors, infrequency of the emissions, rapid dissipation of the exhaust into the air, and short-term nature of the construction activities would result in a less than significant impact associated with construction odors.

4.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			✓	

4.4.1 Environmental Setting

The project is located along the west side of Highway 49 and the north side of Highway 193 within a rural residential area of the community of Cool, California. The alignment is through disturbed roadside terrain adjacent to rural residential, commercial, and industrial properties. Land uses surrounding the project site include commercial establishments at the intersection of Highways 49 and 193 of the proposed alignment. The commercial development includes a shopping center that consists of restaurants and retail stores. Northside School is located at the southern end of the bike path on Cave Valley Road. The remaining portion of the alignment between the two ends is predominantly rural residential property with mixed pastureland.

From its headwaters, Knickerbocker Creek drains a 1,315 ha (3,250 ac) watershed. It flows in a general westerly direction for a distance of about 4.8 kilometers (km) (3 miles) to the proposed project site. From the project site, Knickerbocker Creek flows another three miles to the North Fork American River. The American River flows another 73.2km (45.5 miles) to the Sacramento River. Knickerbocker Creek is a perennial stream in most years.

There are two unnamed mapped first-order tributaries to Knickerbocker Creek (labeled as Tributaries to Knickerbocker Creek) in the project site. These are all intermittent channels. In addition to Knickerbocker Creek and the two unnamed tributaries, there are a variety of other smaller unmapped channels and ditches that cross the proposed trail alignment. There are eight ditches that occur within the project site. In addition, there are several topographic low areas, particularly west of Highway 49, near the intersection of Highways 49 and 193 that support seasonal wetlands. **Figure 2** depicts the channels, ditches, and wetlands that were observed within the survey area.

The BSA is composed of four natural (native and naturalized) vegetative cover types, and disturbed lands. The natural vegetative cover types include Blue Oak Series, California Annual Grassland Series, Willow Scrub Series, and Cattail Series. These designations correspond to the CNPS classification system (Sawyer and Keeler-Wolf, 1995). These cover types are generally discernable; however, they do intergrade within the project area (Padre, 2008).

A statewide database of recorded special-status species (flora and fauna) occurrences is maintained in the California Natural Diversity Database (CNDDB) managed by the California Department of Fish and Game (CDFG). A query of the CNDDB (September 30, 2007 and April 16, 2008) was conducted for all special-status species within the Auburn, Greenwood, Pilot Hill, and Coloma, California 7.5-minute U.S. Geological Survey (USGS) topographic quadrangles. The CNDDB query identified no special-status species within one mile of the project area, but one special-status plant species was reported within 5 miles of the project site.

A list of special-status species having the potential to occur within the project area was requested from the U.S. Fish and Wildlife Service (USFWS). The USFWS list identified fourteen listed species and four candidate species for the County. There are no recorded

occurrences of special-status species within the project area. Each of the species and habitats are listed in **Table 4-4**, which includes species that have been listed by the USFWS and/or California Department of Fish and Game (CDFG) in their lists as regional species and habitats of concern. **Table 4-4** also lists whether the species are present within the project area and includes a rationale for these determinations.

Table 4-4.
Regional Species and Habitats of Concern

HABITATS

	Habitat Present	Rationale
Waters and Wetlands	Yes	Regulated by USACE and CDFG
Riparian woodlands	Yes	Regulated by USACE and CDFG
Oak woodlands	Yes	Protected by El Dorado County
Hardhead streams	No	Not within BSA

PLANTS

Scientific Name	Common Name	Status[1]	Habitat	Habitat Present	Rationale
Senecio layneae	Laynes ragwort	FT	Chaparral, woodland, rocky serpentine and gabbro soils	No	No serpentine or gabbro soils onsite
Calystegia stebbinsii	Stebbin's morning-glory	FE	Chaparral, woodland within rocky serpentine and gabbro soils	No	No serpentine or gabbro soils onsite
Ceanothus roderickii	Pine Hill ceanothus	FE	Chaparral, woodland within rocky serpentine and gabbro soils	No	No serpentine or gabbro soils onsite
Fremontodendron californicum ssp. decumbens	Pine Hill flannelbush	FE	Chaparral, woodland within rocky serpentine and gabbro soils	No	No serpentine or gabbro soils onsite
Galium californicum ssp. sierrae	El Dorado bedstraw	FE	woodland within rocky serpentine and gabbro soils	No	No serpentine or gabbro soils onsite
Allium jepsonii	Jepson's onion	CNPS 1B	Cismontane woodland, Lower montane coniferous	No	No habitat present onsite
Clarkia bilboa ssp. brandegeeae	Brandegee's clarkia	CNPS 1B	Chaparral, Cismontane woodlands	No	No habitat present onsite

INVERTEBRATES					
Lepidurus packardi	Vernal pool tadpole shrimp	FE	Vernal pools	No	Lack of suitable habitat
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT	Elderberry shrubs	No	No elderberry shrubs within the BSA.
FISHES					
Oncorhynchus tshawytscha	Winter-run chinook salmon	FE	Sacramento River with clean, cold water, and gravel beds	No	Lack of suitable habitat
Oncorhynchus tshawytscha	Central Valley spring-run chinook salmon	FT	Sacramento River system	No	Lack of suitable habitat
Oncorhynchus clarki henshawi	Lahontan cutthroat trout	FT	High mountain streams and lakes	No	Lack of suitable habitat
Oncorhynchus mykiss	Central Valley steelhead	FT	Sac-San Joaquin rivers	No	Lack of suitable habitat
Hypomesus transpacificus	Delta smelt	FT	Sac-San Joaquin Delta	No	Lack of suitable habitat
AMPHIBIANS					
Rana aurora draytonii	California red-legged frog	FT	Ponds, pools, wetlands	Possible	Potential habitat, none observed
Ambystoma californiense	California tiger salamander	FT	seasonal pools and stockponds	No	Lack of suitable habitat
Bufo canorus	Yosemite toad	FC	High mountains from 2,430 m (8,000 ft) to 3,480 m (10,000 ft) elevation	No	Project site below elevational range
Rana boylil	Foothill yellow-legged frog	CSC	Streams and rivers to 2,088 m (6,000 ft)	Possible	Potential habitat, none observed.
REPTILES					
Clemmys m. marmorata	Northern Pacific pond turtle	CSC	streams, marshes, ponds, usually north of San Francisco Bay	Yes	Potential habitat, none observed.
Thamnophis gigas	Giant garter snake	FT	Valley marshes and sloughs	No	Lack of suitable habitat
MAMMALS					
Martes pennanti	Fisher	FC	Mature to climax conifer forests	No	Lack of suitable habitat

[1] Status:

FE = Federal Endangered
FT = Federal Threatened
FC = Federal Candidate
CSC = California Species of Concern

4.4.2 Potential Environmental Effects

a) *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant With Mitigation Incorporation. Based on a records search of the CNDDB and the USFWS list for the Auburn quadrangle (Padre, 2008), several special-status plant and wildlife species have the potential to occur onsite or in the project vicinity. Field observations and literature review were conducted to determine the potential for these special-status species to occur within the project area. Based on the reviews, the project area does not support suitable habitat for the special-status plant species.

Habitat is present that potentially could support three special-status wildlife species based on cover type preference, geographic and elevation range, and previous recorded occurrences. These three species are: Foothill Yellow-legged frog (*Rana boylii*) (FYLF), California Red-legged frog (*Rana aurora draytonii*) (CRLF), and Northern Pacific Pond Turtle (*Actinemys marmorata marmorata*) (NPPT).

FYLF have not been recorded in the Auburn quadrangle (CNDDB, 2008), and was not observed during field surveys of the project area. The project would result in the loss of 0.32 acre of jurisdictional wetland/waters as a result of culvert installation or replacement. However, because of the previous disturbance to the channels and paucity of vegetative, suitable habitat for FYLF is minimal, and the project is not likely to adversely affect FYLF. To ensure minimization of potential impacts to FYLF, **Mitigation Measure 2** would be implemented.

The project would result in the loss of approximately 0.32 acre of seasonal wetlands and channels, which is potentially suitable habitat for the CRLF. No CRLF have been identified within the project area and no critical habitat occurs within the project area. To ensure minimization of potential impacts to CRLF, the avoidance and impact minimization efforts listed in **Mitigation Measure 2** for FYLF would be implemented.

There are no occurrences of NPPT in the Auburn quadrangle; however, there is an occurrence within the Greenwood quadrangle approximately 4 miles east of the project area (CNDDB, 2008). No pond turtles were observed during field surveys of the project area. The ephemeral roadside ditches onsite do not provide suitable habitat for the pond turtle due to lack of deep pools and sparse plant and debris cover. Knickerbocker Creek does provide habitat for the NPPT. Previous surveys conducted in the vicinity of the project area also failed to detect the presence of the species (Harland Bartholomew, 1996). It is unlikely that pond turtles occur within the BSA; however, implementation of **Mitigation Measure 2** would result in a less than significant impact to NPPT.

Mitigation Measure 2. The County shall implement the following measures for FYLF (and CRLF and NPPT) avoidance and impact minimization:

- Wetted channel segments, areas of riparian scrub, and other Environmentally Sensitive Areas within the project area, but outside the construction impact area, shall be staked and flagged to avoid encroachment by equipment and construction crews. Environmentally Sensitive Areas within the construction impact area that can be avoided by equipment and crews shall also be staked and flagged to minimize effects of construction.

- A qualified biologist shall conduct a FYLF/CRLF survey of the project site 48 hours before the onset of work activities. If any life stage of the FYLF/CRLF is found, and these individuals are likely to be killed or injured by work activities, the approved biologist shall be allowed sufficient time to move them from the site before work activities begin. The biologist shall relocate the FYLFs/CRLFs the shortest distance possible to a location that contains suitable habitat and will not be affected by activities associated with the proposed project.

- During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

- All refueling, maintenance, and staging of equipment and vehicles shall occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat. The monitor shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the County shall ensure that a plan is in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

- Project sites that are temporarily impacted shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. This measure shall be implemented in all areas disturbed by activities associated with the project, unless the County determines that it is not feasible or practical. (For example, an area disturbed by construction that would be used for future activities need not be revegetated.)

- The number of access routes, size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal.

Environmentally Sensitive Areas shall be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to FYLF/CRLF habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

- The County shall attempt to schedule work activities for times of the year when impacts to the FYLF/CRLF would be minimal. To control sedimentation during and after project implementation, the County and its contractors shall implement Best Management Practices outlined in any authorizations or permits, issued under the authorities of the Clean Water Act that it receives for the specific project. If best management practices are ineffective, the County shall attempt to remedy the situation immediately, in consultation with the USFWS.

- Although unlikely, if a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 0.2 inches to prevent FYLFs/CRLFs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. The methods and materials used in any dewatering shall be determined by the County in consultation with the USFWS on site-specific basis. Upon completion of construction activities, any diversions or barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed shall be minimized to the maximum extent possible; any imported material shall be removed from the streambed upon completion of the project.

- The monitoring biologist shall permanently remove any individuals of exotic species, such as bullfrogs (*Rana catesbeiana*), crayfish, and centrarchid fishes from the project area, to the maximum extent possible. The biologist shall be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

- To ensure that diseases are not conveyed between work sites by the biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times.

b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant With Mitigation Implementation. Sensitive habitats include those that are of special concern to resource agencies and those that are protected under CEQA, the California Fish and Game Code, or the Clean Water Act. Development of the proposed project has the potential to permanently impact approximately 0.32 acre of potentially jurisdictional waters/wetlands. Of the jurisdictional waters/wetlands onsite, 0.21 acres are wetlands that would be impacted. Implementation of **Mitigation Measure 3** would result in a less than significant impact to wetlands and waters of the U.S.

Mitigation Measure 3. Prior to disturbing any of the wetland features within the project area, the Delineation of Waters of the United States prepared for the proposed project shall be submitted to the Corps and the appropriate Section 404 permit shall be acquired. Additionally, the County shall obtain a Section 401 permit from the California Regional Water Quality Control Board prior to disturbance. Any waters of the U.S. that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps' mitigation guidelines. Based on a projected combined loss of approximately 0.32 acre of waters and wetlands and an assumed replacement-to-loss compensation ratio of 3:1, the County shall acquire 0.96 acre of mitigation credits. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the Corps. The County shall obtain a Streambed Alteration Agreement from CDFG, pursuant to Section 1600 of the CDFG Code, for each stream crossing and any other activities affecting the bed, bank or associated riparian vegetation of the stream. The County shall abide by the conditions of any executed permits.

c) *Would the project have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.), through direct removal, filling, hydrological interruption or other means?*

Less Than Significant With Mitigation Incorporation. Development of the proposed project has the potential to permanently impact approximately 0.32 acre of potentially jurisdictional waters/wetlands. Of the jurisdictional waters/wetlands onsite, 0.21 acres are wetlands that would be impacted. These areas are potentially regulated by the Corps and/or CDFG. Additionally, these areas are protected under the El Dorado County General Plan. Implementation of **Mitigation Measure 3** would reduce the impact to waters of the U.S. and wetlands within the project area to less than significant.

d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Less Than Significant. Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Within the vicinity of the project

area, Knickerbocker Creek provides a good natural migration corridor within the riparian habitat on the creek. However, Highways 49 and 193 adjacent to the proposed bicycle path alignment may discourage migration of wildlife. This impact is considered less than significant.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Less Than Significant. Development of the proposed project would require the removal of only one tree, a foothill pine (*Pinus sabiniana*). No oak trees are expected to be removed for construction of the trail; however, there are several areas of oak woodland cover adjacent to the proposed trail alignment. Because the proposed project would not result in the removal of oak trees, this impact is considered less than significant.

Additionally, development of the proposed project has the potential to permanently impact approximately 0.32 acre of potentially jurisdictional waters/wetlands, which are protected by County General Plan Policy 7.3.3.4. The proposed project would comply with the General Plan Policy 7.3.3.4, which provides for wetlands buffer and setback requirements. The project proposes grading and construction activities in accordance with the Section 404 permit that would be obtained. Because the proposed project would be consistent with the General Plan Policy protecting wetlands, this impact is considered less than significant.

f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?*

The USFWS' adopted recovery plans for California Red-legged Frog or gabbro soils plants apply to portions of El Dorado County. The proposed project is located within the Sierra Nevada Foothills and Central Valley Recovery Unit, Cosumnes River Core Area identified in the USFWS Recovery Plan for the California Red-legged Frog and based on the Natural Environment Study prepared for the proposed project (Padre, 2008), the project is not likely to adversely affect CRLF.

Additionally, the project area is outside of the identified boundaries of the Pine Hill formation as identified in the Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills; therefore, this impact is considered less than significant.

4.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		✓		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

4.5.1 Environmental Setting

Peak & Associates, Inc. (2008) conducted a record search through the staff of the North Central California Information Center (NCIC) of the California Historical Resources Information System on February 29, 2008 for the project area and a 200-foot radius around the project area. Three sites were identified within this Area of Potential Effect (APE): one prehistoric site, and two historic sites. The prehistoric site is shown on available mapping as a locus of a larger site. The two historic sites consist of a former ranch site and man-made terraces that are part of a larger site. Because the man-made terraces are located in the Area of Direct Impact, an Extended Phase I (XPI) excavation was conducted on June 13, 2008.

As part of the XPI, seven trenches and seven Shovel Test Pits (STPs) were dug within the parameters of the terraced site. No evidence of a foundation was discovered. In a few of the trenches, and in all of the STPs there were a number of square nails recovered down to a depth of approximately one foot (to clay hardpan/subsoil). A few pieces of bottle and windowpane glass, a metal bracket, a fork, and some white-glaze pottery fragments were also recovered from a couple of the trenches and one of the STPs located next to the southern edge of the terrace and embankment above Highway 193.

4.5.2 Potential Environmental Effects

a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?*

Less Than Significant with Mitigation Incorporation. Based on the results of the XPI, the items collected indicate the potential for a significant historic period site within the project area. In order to reduce this impact to a less-than-significant level, **Mitigation Measure 4** would be implemented.

Mitigation Measure 4. The County shall retain the services of a qualified archaeologist to complete a Phase II archaeological investigation. The Phase II investigation would be used to determine the limits, density, and eligibility status for inclusion on the National Register of Historic Properties, if the County and Caltrans determine that this type of analysis is appropriate for compliance with applicable regulations. If the Phase II investigations determine that a significant site would be affected, the County will conduct a Phase III data recovery investigation to determine the site significance. If the Phase III data recovery investigation determines that a significant historic site would not be affected, then the proposed undertaking would have no effect on historical resources and no further measures would be necessary. If the Phase III data recovery investigation determines that the proposed undertaking would have an adverse effect on historical resources, project construction would be postponed until such time as all requisite approvals are received from the California State Historic Preservation Officer and Caltrans.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

Less Than Significant with Mitigation Incorporation. Based on the results of the XPI, the items collected indicate the potential for a significant archaeological site within the project area. In order to reduce this impact to a less-than-significant level, **Mitigation Measure 4** would be implemented.

c) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

Less Than Significant with Mitigation Incorporation. Due to the project area's proximity to limestone cave deposits, the project has the potential to impact paleontological resources. Implementation of **Mitigation Measure 5** would reduce this potential impact to less than significant.

Mitigation Measure 5. If paleontological resources are encountered during construction activities, all work within 25 feet of the discovery shall be redirected until a qualified paleontologist has evaluated the resources, prepared a fossil locality form documenting them, and made recommendations regarding their treatment. If paleontological resources are identified, it is recommended that such resources be avoided by project activities. Paleontologists shall be empowered to halt construction

activities within 25 feet of the discovery to review the possible paleontological material and to protect the resource while it is being evaluated. If avoidance is not feasible, adverse effects to such resources shall be mitigated. Mitigation can include data recovery and analysis, preparation of a report and the accession of fossil material recovered to an accredited paleontological repository.

d) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant with Mitigation Incorporation. It is not anticipated that any human remains would be encountered during construction of the proposed project due to the previously disturbed nature of the lands within the project area; however, the proposed project would be subject to the provisions of the California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.94 et seq., regarding the discovery and disturbance of human remains should any human remains be discovered during project construction. Implementation of **Mitigation Measure 6** would reduce potential disturbance of human remains to a less-than-significant level.

Mitigation Measure. If human bone, or bones of unknown origin, is found during project construction, all work shall stop in the vicinity of the find and the El Dorado County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify the person it believes to be the most likely descendant. The most likely descendant shall work with the County to develop a program for reinterment of the human remains and any associated artifacts. No additional work shall take place within the immediate vicinity of the find until the identified appropriate actions have been completed.

4.6 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?			✓	
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				✓
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓

4.6.1 Environmental Setting

Regional Geology

El Dorado County is located in the Sierra Nevada geomorphic province of California, which is east of the Great Valley province and west of the Range and Basin provinces. The Sierra Nevada province is characterized by steep-sided hills and narrow, rocky stream channels. This province consists of Pliocene and older deposits that have been uplifted as a result of plate tectonics, granitic intrusion, and volcanic activity. Subsequent glaciation and additional volcanic activity are factors that led to the east-west orientation of stream channels (El Dorado County General Plan Draft EIR, 2003).

The southwestern foothills of El Dorado County are composed of rocks of the Mariposa Formation that include amphibolite, serpentine, and pyroxenite. The northwestern areas of the county consist of the Calaveras Formation, which includes metamorphic rock such as chert, slate, quartzite, and mica schist. In addition, limited serpentine formations are located in this area. The higher peaks in the County consist primarily of igneous and metamorphic rocks with granite intrusions, a main soil parent material at the higher elevations (El Dorado County General Plan Draft EIR, 2003).

Seismicity

Seismicity is defined as the geographic and historical distribution of earthquake activity. Seismic activity may result in geologic and seismic hazards including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards. Based on historical seismic activity and fault and seismic hazards mapping, El Dorado County is considered to have relatively low potential for seismic activity, and is located beyond the highly active fault zones of the coastal areas of California. The County's fault systems and associated seismic hazards are described below (El Dorado County General Plan Draft EIR, 2003).

Fault Systems

Earthquake activity is intrinsically related to the distribution of fault systems (i.e., faults or fault zones) in a particular area. The distribution of known faults in El Dorado County is concentrated in the western portion of the county, with several isolated faults in the central county area and the Lake Tahoe Basin. Fault systems mapped in western El Dorado County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras–Shoo Fly Thrust. No active faults have been identified in El Dorado County. One fault, part of the Rescue Lineament–Bear Mountains fault zone, is classified as a well located late-Quaternary fault; therefore, it represents the only potentially active fault in the County. It is part of the Foothill Fault Suture Zone system, which was considered inactive until a Richter scale magnitude 5.7 earthquake occurred near Oroville on August 1, 1975. All other faults located in El Dorado County are classified as pre-Quaternary (inactive) (El Dorado County General Plan Draft EIR, 2003).

Soils

Soils on the west slope of El Dorado County consist of well-drained silt and gravelly loams divided into two physiographic regions, the Lower and Middle Foothills and the Mountainous Uplands. There are a total of eight soil associations in western El Dorado County. Six soil mapping units occur within the project area:

- Argonaut gravelly loam, 2 to 15 percent slopes (AkC);
- Auburn silt loam, 2 to 30 percent slopes (AwD);
- Delpiedra very rocky loam, 3 to 50 percent slopes (DeD);
- Mixed alluvial land (MpB);
- Serpentine rock land (SaF);
- Sobrante silt loam, 3 to 15 percent slopes (SuC).

4.6.2 Potential Environmental Effects

a) *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving:*

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

No Impact. El Dorado County does not contain any earthquake faults as identified on the most recent Alquist-Priolo Earthquake Fault Zoning Map(s); therefore, there would be no potential impact of the project to expose people and/or structures to fault rupture hazards.

ii) *Strong seismic ground shaking?*

Less than Significant. The project is not located in an area subject to seismic ground shaking or seismic-related ground failure and is not subject to landslides, seismic-related or otherwise. The project area does not include any structures or dwellings that would be a high risk of collapse during a seismic event. The risk of adverse effects from ground shaking is considered to be less than significant.

iii) *Seismic-related ground failure, including liquefaction?*

No Impact. Liquefaction is most likely to occur in deposits of water-saturated alluvium or similar deposits of artificial fill. No areas of this type have been identified in El Dorado County; therefore, no impacts due to liquefaction are anticipated.

iv) *Landslides?*

No Impact. The project would not alter slopes or other areas where landslides are likely to occur; therefore, the likelihood of landslides is minimal and no impacts are anticipated.

b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Less Than Significant. The project would require grading of approximately 5.1 acres which, if completed without the application of standard Best Management Practices, could result in a condition that might be susceptible to stormwater-related erosion. However, all construction would be consistent with the requirements of the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County. DOT or its contractor will prepare a construction-related Storm Water Pollution Prevention Plan (SWPPP), consistent with Section 402 of the Clean Water Act and construction activities will include implementation of stormwater runoff BMPs identified with the SWPPP. Application of these requirements and measures would prevent substantial erosion or topsoil loss. Following construction, all disturbed areas not paved would be revegetated consistent with measures to be identified within the SWPPP to ensure the long-term minimization of erosion and topsoil loss potential.

c) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant. **Table 4-5** provides a list of the soils within the project area and their drainage class and shrink-swell potential. The soils within the project area have low to moderate shrink-swell potentials. None of the abovementioned soil types are susceptible to landsliding, lateral spreading, subsidence, liquefaction, or collapse. The project is also not located on a geologic unit known to be unstable and susceptible to landsliding, lateral spreading, subsidence, liquefaction, or collapse.

Table 4-5. Soil Map Units within the Project Area

Map Unit Name	Map Unit Symbol	Drainage Class	Shrink-swell potential
Auburn silt loam, 2 to 30 percent slopes	AwD	Well-drained	Low
Delpiedra very rocky loam, 3 to 50 percent slopes	DeE	Well-drained	Moderate
Serpentine rock land	SaF	??	--
Sobrante silt loam, 3 to 15 percent slopes	SuC	Well-drained	Low to Moderate
Argonaut gravelly loam, 2 to 15 percent slopes	AkC	Well-drained	Low (on surface) High (in subsurface)
Mixed alluvial land	MpB	Somewhat poorly drained	Low

Source: USDA, Natural Resources Conservation Service, Web Soil Survey, 2008.

d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

No Impact. Expansive soils are soils that increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise during each wet season and fall during each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows, which may result in structural hazards. The proposed project would include the modification of the soil immediately below any trail improvements. As discussed above, the soils within the project area have low to moderate shrink-swell potentials. Further, construction of the improvements would include the addition of an aggregate base below the areas that would be paved reducing potential impacts from soil expansion and contraction. Therefore, no impact associated with expansive soils is anticipated.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. Neither septic tanks nor alternative wastewater disposal systems are part of the proposed project. Therefore, there is no impact associated with the proposed project.

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4.7 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			✓	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

4.7.1 Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a Federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as follows:

> *A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed*. (California Code of Regulations, Title 22, Section 66261.10)

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosivity, and reactivity. CCR, Title 22, Sections 66261.20-66261.24 define the aforementioned properties. The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies.

Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese List", includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. In addition, the El Dorado County Environmental Management Department maintains records of toxic or hazardous material incidents, and the Central Valley Regional Water Quality Control Board (RWQCB) keeps files on hazardous material sites.

Most hazardous materials regulation and enforcement in El Dorado County is overseen by the El Dorado County Environmental Management Department which refers large cases of hazardous materials contamination or violations to the Central Valley RWQCB and the State Department of Toxic Substances Control (DTSC). Other agencies, such as the El Dorado County AQMD and the Federal and State Occupational Safety and Health Administrations (OSHA), may also be involved when issues related to hazardous materials arise.

Based on an online review of DTSC's ENVIROSTOR database (http://www.envirostor.dtsc.ca.gov/public/), no Cleanup Sites (Federal Superfund Sites [NPL], State Response Sites, Voluntary Cleanup Sites, and/or School Cleanup Sites) and/or Hazardous Waste Facilities (Permitted or Corrective Action) are located within one mile of the Proposed Project area.

4.7.2 Potential Environmental Effects

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?*

Less Than Significant. Small amounts of hazardous materials would be used during construction activities (i.e., equipment maintenance, fuel, solvents, trail paving and striping materials). Hazardous materials would only be used during construction of the project, and any hazardous material uses would be required to comply with all applicable local, state and federal standards associated with the handling and storage of hazardous materials. Therefore, this impact is considered less than significant.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant. The proposed project would result in a less than significant impact associated with the use and potential accidental release of hazardous materials during construction (see discussion at item "a", above).

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant. The nearest schools are adjacent to the southern terminus of the project area (Northside Elementary School and Cool Christian School). As noted above, the project would involve the short-term handling of hazardous materials during construction; however, handling and storage of hazardous materials would comply with all applicable local, state, and federal standards. This is considered a less than significant impact.

d) *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. The project area does not include any sites which were included on a list of hazardous materials sites as maintained by the DTSC.

e) *For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The project is not located within an Airport Land Use Plan area or in the vicinity of an airport. The nearest airport to the project area is the Auburn Municipal Airport located approximately 5.6 miles northwest of the project area.

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The project is not located within the vicinity of a private airstrip.

g) *Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant. Construction of the proposed project would occur within the unpaved portion of Caltrans right-of-way adjacent to Highway 49 and Highway 193. Construction of the proposed project may require lane closures or traffic lane diversions to enable construction activities to proceed safely. Construction equipment accessing the project area via the local roadway system has the potential to result in reduced driving speeds. Project construction activities would be coordinated with local law enforcement and emergency services providers. As a result of this coordination, law enforcement and emergency service providers would be aware of project construction and the potential for any emergency vehicle movement delays within the project area and measures to avoid such delays would be determined. Construction of the proposed project would not affect the provision of emergency services in and adjacent to the project area or evacuation in the event of a major emergency.

As discussed above, primary access to five residences in the project region transect the proposed trail alignment. Yield signs would be installed at the trail's intersection with the private driveways. Because the County would coordinate with property owners/tenants and local law enforcement and emergency service providers, this impact is considered less than significant.

h) *Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

No Impact. According to the California Fire Alliance's Fire Planning and Mapping Tools database, the southern portion of the project area is located within and adjacent to an area classified as "no fire threat, while, the remainder of the project is in an area dominated by fuels classified as "high" to "very high" in terms of wildland fire risk (http://wildfire.cr.usgs.gov/fireplanning), accessed February 28, 2008). However, project construction and operation is not anticipated to result in a new or increased exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

4.8 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?			✓	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				✓
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			✓	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			✓	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
f) Otherwise substantially degrade water quality?				✓
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j) Inundation by seiche, tsunami, or mudflow?				✓

4.8.1 Environmental Setting

The project is located within the South Fork American River watershed, which encompasses the central region of El Dorado County, extending from the headwaters at Echo Summit, west to the terminus at Folsom Reservoir (El Dorado County, 1998).

4.8.2 Potential Environmental Effects

a) *Would the project violate any water quality standards or waste discharge requirements?*

Less Than Significant. The project would be subject to the National Pollutant Discharge Elimination System (NPDES) permit, which requires the use of Best Management Practices (BMPs), as outlined in the *Storm Water Management Plan for Western El Dorado County (SWMP)*, to minimize water quality impacts from construction projects. The County would obtain coverage for the project under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity, Order No. 99-08 DWQ. In accordance with the provisions of the General Permit and the SWMP, the County would require the contractor to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to reduce or minimize discharge of pollutants from construction activities.

Due to the implementation of BMPs as required by El Dorado County and the NPDES permit, construction activities associated with the project would result in less than significant impacts to water quality.

b) *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

No Impact. The project would not affect the current function of the fractured rock aquifer groundwater systems in the area, including movement within the aquifers and recharge.

c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?*

Less Than Significant. On-site drainage modification for the proposed project would include extension of two existing cross culverts and installation of approximately 600 feet of underground storm drainpipe.

Such modification would be constructed consistent with County standards and would be protected at the outfall in a manner that would minimize on- and off-site erosion

and siltation potential. As such, the project would result in less than significant impacts associated with erosion and siltation.

d) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*

Less Than Significant. The project involves installation of approximately 600 feet of culvert within the project area. The project would result in the addition of 2.24 acres (97,574 square feet) of impervious surface in the form of new paved trail surface. In order to accommodate this increase in impervious surfaces within the project area, the project would install approximately 600 feet of culvert. Installation of the underground drainpipes would accommodate expected runoff, and the proposed project would not result in substantial increases in runoff to the extent that the existing drainage systems within the project area would be adversely affected and/or would operate inefficiently as to cause flooding on- or off-site. Therefore, this impact is considered less than significant.

e) *Would the project create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant. The proposed project would result in a net increase of approximately 2.24 acres (97,574 square feet) of impervious surface. Proposed improvements to the drainage infrastructure associated with the project would accommodate expected runoff, and the additional impervious surface is not expected to contribute to a substantial increase in water runoff from the site (see additional discussion at item "d", above). Therefore, the project would have a less than significant contribution to the amount and quality of stormwater flows in the area.

f) *Would the project otherwise substantially degrade water quality?*

No Impact. No additional impacts other than those discussed under c) and e) above are anticipated.

g) *Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

No Impact. The proposed project is a trail development project and no housing development is associated with the project.

h) *Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?*

No Impact. According to the Flood Insurance Rate Map 0600400175B, the project is located within an area of minimal flooding. The project is not located within or adjacent to any dams, levees, or mapped 100-year floodplains. The project would provide sufficient stormwater runoff facilities so as not to impede or redirect stormwater flows.

i) *Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?*

No Impact. The project is not located within or adjacent to any dams, levees, or mapped 100-year floodplains.

j) *Would the project be subject to inundation by seiche, tsunami or mudflow?*

No Impact. The proposed project would not create an additional risk from seiche or tsunami in the project area and the relatively flat topography eliminates the potential for mudslides to inundate the project site.

4.9 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				

4.9.1 Environmental Setting

The primary applicable land use plan within the project area are the 2004 El Dorado County General Plan. The El Dorado County General Plan policies are applicable to the proposed project area. In addition, the 2005 El Dorado County Bicycle Transportation Plan provides bicycle planning direction within the project area that require consideration. The Bicycle Transportation Plan identifies development of a Class I bicycle path adjacent to the Highway 49 segment the project area alignment as a Tier 1 project, while the Plan also identifies development of a Class II bicycle lane adjacent to the Highway 193 segment of the project area alignment as a Tier I project.

4.9.2 Potential Environmental Effects

a) *Would the project physically divide an established community?*

No Impact. The project area is located adjacent to existing roadway, and communities adjacent to the project area consist of commercial and low-density residential. The project area would not divide adjacent communities.

b) *Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

Less Than Significant. The project would not conflict with any 2004 General Plan goals, policies or objectives intended to mitigate potential environmental effects (refer to the responses to 4.4(e) above). Implementation of **Mitigation Measure 3** would ensure that the proposed project would not conflict with any 2004 General Plan goals, policies and objectives. Likewise, the project would not conflict with any goals, objectives, or policies identified within the 2005 El Dorado County Bicycle Transportation Plan.

c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

Less Than Significant. The USFWS' adopted recovery plans for California Red-legged Frog or gabbro soils plants apply to portions of El Dorado County. The proposed project is located within the Sierra Nevada Foothills and Central Valley Recovery Unit, Cosumnes River Core Area identified in the USFWS Recovery Plan for the California Red-legged Frog and based on the Natural Environment Study prepared for the proposed project (Padre, 2008), the project is not likely to adversely affect CRLF.

Additionally, the project area is outside of the identified boundaries of the Pine Hill formation as identified in the Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills; therefore, this impact is considered less than significant.

4.10 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

4.10.1 Environmental Setting

El Dorado County is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, gold in particular, are considered the most significant extractive mineral resources. No mineral extraction activities occur within or in the vicinity of the project site.

4.10.2 Potential Environmental Effects

a) *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state*

No Impact. The project is not within or adjacent to any important mineral resource areas as identified by the State of California; therefore, the proposed project would not impact the availability of mineral resources that would be of value to the state.

b) *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. The project is not within or adjacent to any important mineral resource areas as identified by El Dorado County (2004 El Dorado County General Plan Figure CO-1); therefore, the proposed project would not impact the availability of mineral resources that would be of value to the region.

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4.11 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			✓	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓

4.11.1 Environmental Setting

The project area is located within the community of Cool and experiences increased ambient noise levels from vehicular traffic along Highway 49 and Highway 193. Community ambient noise surveys were conducted in December 2002 and January 2003 for the purpose of documenting and measuring the existing noise environment in areas of the County that contain noise-sensitive land uses. The Highway 193/Cherry Acres Road intersection within the community of Cool was evaluated during these surveys, which indicate that the L_{dn} in the project vicinity is 47.6 dBA and the CNEL is 47.9 dBA. The ambient noise environment is predominantly a result of vehicular traffic and truck traffic from the Teichert Quarry located approximately 1.2 miles north of the project area.

County General Plan Policy 6.5.1.11 outlines standards for daytime construction and would apply to construction-related noise associated with the project. General Plan Policy 6.5.1.11 notes that nighttime construction activities are allowed if it can be shown that nighttime construction activities would alleviate traffic congestion and safety hazards.

4.11.2 Potential Environmental Effects

a) *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies?*

Construction-related Noise

Less Than Significant. Construction activities could increase noise levels temporarily in the vicinity of the project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, time of day, and similar factors. However, these increases would be temporary. Construction activity would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11. Given that the project contractor would adhere to applicable County construction-related noise standards, this impact is considered less than significant.

Traffic-related Noise

Less than Significant. It is anticipated that vehicular traffic associated with the proposed project would be minimal as trail users would likely run, walk, or cycle to the project area. Any additional vehicular trips associated with the project is anticipated to result in less than significant traffic-related noise.

b) *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant. Project construction includes activities, such as operation of large pieces of equipment (e.g., heavy trucks), which may result in the periodic, temporary generation of groundborne vibration. A large boulder is located adjacent to Highway 193 and would be removed with air tools and heavy equipment. Given the nature of any potential groundborne vibration and given that any impacts would be temporary and periodic, potential impacts are less than significant.

c) *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant. Because the project would result be minimal additional traffic trips, the proposed project would not contribute to a substantial permanent increase in the ambient noise level in the project vicinity.

d) *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant. Construction activities would increase noise levels temporarily in the vicinity of the project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, weather, time of day, and other factors. However, these increases would be temporary. Construction activity would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11. Because the project contractor would be required to comply with applicable County construction-related noise standards, this impact is considered less than significant.

e) *For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Less Than Significant. With the exception of temporary construction noise, discussed above, the proposed project would not result in a change in noise exposure for people residing or working within the project area.

f) *For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

No Impact. The project is not located within the vicinity of a private airstrip.

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4.12 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

4.12.1 Environmental Setting

The project alignment is located adjacent to Highway 49 and Highway 193 in the community of Cool. The project area is adjacent to existing residential uses and ruderal roadside vegetation. Adjacent land uses include open space, commercial, medium-density residential and multi-family residential. Primary access to five residences in the project region transect the proposed trail alignment.

4.12.2 Potential Environmental Effects

a) *Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

No Impact. The proposed project does not propose construction or replacement of new homes or businesses, would not affect the current distribution of homes and businesses, and does not propose extension of infrastructure that could support substantial population growth.

b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The project does not involve the displacement of any housing.

c) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

No Impact. The project does not involve the displacement of people.

4.13 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

4.13.1 Environmental Setting

General public safety and law enforcement services for the project area are provided by the El Dorado County Sheriff. The El Dorado County Fire District provides fire protection services and emergency services to the project area. The nearest fire station is Station 72 located approximately 0.25 mile north of the project area at 7200 Saint Florian Court in Cool.

4.13.2 Potential Environmental Effects

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

a) *Fire protection?*

No Impact. The proposed project would not include elements that would increase human presence in the area; therefore, there would be no need for additional governmental facilities to provide fire protection.

b) *Police protection?*

No Impact. The proposed project would not include elements that would increase human presence in the area; therefore, there would be no need for additional governmental facilities to provide police protection.

c) *Schools?*

No Impact. The proposed project would not include elements that would increase population in the area and would not result in an increased demand for schools.

d) *Parks?*

No Impact. The proposed project would not include elements that would increase human presence in the area; therefore, the project would not result in an increased demand for parks or governmental facilities to maintain parks.

e) *Other public facilities?*

No Impact. The proposed project would not include residential or commercial components that would result in increased human presence in the area; therefore, the project would have no impact on other public facilities.

4.14 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

4.14.1 Environmental Setting

The project area is currently undeveloped land adjacent to the Highway 49 and Highway 193 rights-of-way. Many recreational enthusiasts use the existing Highway 49 and Highway 193 paved shoulders for running and cycling. The eastern boundary of the Auburn State Recreation Area is located approximately 1,000 feet west of the southern terminus of the project area. The Auburn State Recreation Area is located outside of the project area, but offers hiking, swimming, boating, fishing, camping, mountain biking, gold panning, equestrian/horseback riding trails and off-highway motorcycle riding opportunities.

4.14.2 Potential Environmental Effects

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Less Than Significant. The project would not increase the use of existing recreational facilities in the area; however, the proposed project involves the development of a recreational facility adjacent to the Highway 49 and Highway 193 alignments. The County would be responsible for routine maintenance along the trail, and it is not anticipated that regular use by trail users would result in substantial physical deterioration.

b) *Does the project include recreational facilities, or require the construction or expansion of existing facilities, which might have an adverse physical effect on the environment?*

Less Than Significant. The proposed project is a trail (recreational facility) development project. Although the project has the potential to result in adverse physical effects on the environment, all significant impacts would be reduced to less-than-significant levels through implementation of the proposed mitigation measures.

4.15 Transportation/Traffic

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				✓
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				✓
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Result in inadequate parking capacity?				✓
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			✓	

4.15.1 Environmental Setting

As stated in the 2005 El Dorado County Bicycle Transportation Plan: "There is continued development on the western slope of the County, with a majority of the most recent growth concentrated in El Dorado Hills near the Sacramento County line. The residential boom in El Dorado Hills and Cameron Park has increased the demand for transportation options. In more isolated areas, there is demand for the county to provide bicycle facilities within communities so residents can leave their cars at home for short, local trips." The proposed trail alignment is located adjacent to the Highway 49 and Highway

193 rights-of-way. Roadways adjacent to the project area include Highway 49, Highway 193, Cave Valley Road, and American River Trail.

4.15.2 Potential Environmental Effects

a) *Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?*

No Impact. Because the project involves the development of a Class I bicycle facility and would not result in a traffic-inducing or growth-inducing expansion, the project would not directly result in an increase in traffic.

b) *Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

No Impact. It is anticipated that the proposed project would not result in increased vehicular use of area roadways; therefore, the proposed project would not result in worsened levels of service on area roadways.

c) *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

No Impact. The proposed project would not result in a change in air traffic patterns or increase traffic levels that would result in a substantial safety risk. Therefore, no impacts on air traffic patterns would occur as a result of this project.

d) *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant. The proposed project includes the installation of signage to alert trail users and motorists to potential conflicts between bicyclists, pedestrians and vehicles. With the installation of the proposed signage, this impact is considered less than significant.

e) *Would the project result in inadequate emergency access?*

Less Than Significant. Primary access to five residences in the project region transect the proposed trail alignment. Area residents and emergency service providers would be notified of temporary access closure resulting from construction activities. No lane closures would be required along Highway 49 and Highway 193 and emergency access vehicles would have access throughout the construction phase. This impact is considered less than significant.

f) *Would the project result in inadequate parking capacity?*

No Impact. The project does not propose development of parking nor would it result in the loss of existing parking capacity.

g) *Would the project conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

Less Than Significant. The El Dorado County Transportation Commission's 2005 Bicycle Transportation Plan identifies this segment of the El Dorado Trail as the top priority for proposed Class I bicycle path development. This is considered a beneficial impact.

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4.16 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

4.16.1 Environmental Setting

Utilities located within and adjacent to the project area include water and storm drains provided by the Georgetown Divide Public Utility District, electricity provided by Pacific

Gas and Electric (PG&E), and telephone services provided by AT&T Communications. Solid waste services in the project area are provided by El Dorado Disposal Service, Inc. Storm drainage facilities are maintained by Caltrans or private owners.

4.16.2 Potential Environmental Effects

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

No Impact. The proposed project would not produce additional wastewater; and therefore, the proposed project would not result in impacts to wastewater treatment facilities**.**

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No Impact. Please refer to response a) above. Furthermore, the project would not require the use of water beyond that already available in the area for emergency purposes. The project would have no impact on water or wastewater treatment facilities.

c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant. The project would result in the addition of 2.24 acres (97,574 square feet) of impervious surface in the form of new paved trail surface. In order to accommodate the proposed improvement, the project would involve the installation of approximately 600 feet of culvert within the project area. The proposed storm water drainage improvements would be properly constructed and armored as to prevent any environmental impacts, such as scouring and erosion (see the response to Item 4.8(a), (c) and (f) above). These drainage improvements would not cause significant environmental effects. This impact is considered less than significant.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

No Impact. The proposed project would require no water service; therefore, the proposed project would have no impact on water supplies.

e) *Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?*

No Impact. The proposed project would not produce wastewater; therefore, the proposed project would not result in an impact to wastewater treatment capacity.

f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Less than Significant. Solid waste generated by the project would be limited to construction debris, including asphalt and concrete, generated by the construction of the proposed improvements. Solid waste disposal would occur in accordance with federal, state and local regulations. Disposal would occur at permitted landfills. Therefore, the proposed project would not generate the need for new solid waste facility and the project's impacts would be considered less than significant.

g) *Comply with federal, state and local statutes and regulations related to solid waste?*

Less Than Significant. The proposed project would conform to all applicable state and federal solid waste regulations; therefore, the impact would be considered less than significant.

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4.17 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			✓	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant. As discussed throughout this checklist, the project has the potential to result in adverse physical effects on the environmental; however, due to implementation of the proposed mitigation measures, the project is not expected to degrade the quality of the environment. Furthermore, the project is not expected to substantially reduce the habitat or affect populations of any fish or wildlife species (see Section 4.4) or eliminate important examples of the major period of California

history or prehistory (see Section 4.5). Full implementation of the proposed mitigation measures would result in a less than significant impact.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?*

Less than Significant. The following sections discuss the potential for cumulative impacts associated with each resource checklist category in the preceding sections.

Aesthetics

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on the visual resources along U.S 50; however, discussion of cumulative visual effects outside of the U.S. 50 corridor is not provided.

Implementation of the proposed project is not expected to contribute to cumulative visual resource impacts associated with the development of the trail. The proposed project would not significantly alter the existing visual character of the project area, would not result in the removal of an identified scenic resource, and is not visible from a designated State scenic highway. Thus, a less than significant impact to aesthetics is anticipated under cumulative conditions.

Agricultural Resources

No agricultural resources are present within the project area or in the areas immediately surrounding or adjacent to the roadway. No Farmland is present within the project area, and the project would not result in conversion of farmland to a non-agricultural use. Therefore, the proposed project would not impact agricultural resources under cumulative conditions.

Air Quality

The project would result in temporary (construction-related) increases in PM_{10}, NO_x, and ROG. However, project construction emissions were determined to be less than significant. This determination is based upon significance thresholds prescribed by the EDCAQMD and developed in recognition of the County's air quality (including its ozone and PM_{10} non-attainment status). These criteria are therefore considered applicable for consideration of project-related cumulative impacts. As a result, it has been determined that the project would not result in cumulatively considerable long-term effects upon the region's air quality.

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on air quality due to planned development which would result in increases in motor vehicle travel, wood fire stoves/fireplaces, and other sources that could contribute

cumulatively to the significant impact on air quality in the region. Because the proposed project would not result in increases in motor vehicle travel or associated air pollutant emissions, the proposed project would not impact air quality under cumulative conditions.

Biological Resources

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on biological resources due to planned development which has the potential to reduce populations of special-status species, such as rare plant communities and the California red-legged frog, that occupy oak woodland, chaparral, and riparian habitats. Because **Mitigation Measures 2** and **3** would be implemented, potential cumulative impacts on special-status species and wetlands/waters is considered less than significant.

When combined with the impacts associated with Cool Village Retail and Office Development Project a total of 0.93 acres of wetlands would be adversely affected by new construction. Mitigation would result in the creation/restoration of at least 2.79 acres of wetlands and/or riparian woodland. Consequently, the cumulative effects of the projects would be a net increase in amount and quality of riparian and wetland habitat. Because of implementation of **Mitigation Measure 3**, the proposed project would result in a less than significant cumulative impact to wetlands and waters of the U.S.

Cultural Resources

Three resources (one prehistoric and two historic) have been identified within the project area. Implementation of **Mitigation Measure 4** would ensure that the proposed project would not adversely impact any known historical, archaeological, paleontological, or cultural resources in the project area. If previously undiscovered cultural resources are discovered during construction activities, the proposed project would comply with the provisions of the California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.94 et seq., regarding the discovery and disturbance of human remains should any human remains be discovered during project construction. With implementation of **Mitigation Measure 5,** the project level impacts to cultural resources associated with the proposed project are considered less than significant. Therefore, the project would not contribute to potential cumulative impacts associated with the destruction of undiscovered cultural resources.

Geology and Soils

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on geology and soils due to planned development as site-specific. No cumulative effects were identified in the General Plan EIR. Project-related impacts on geology and soils would be site-specific and implementation of the proposed project would not

contribute to seismic hazards or water quality impacts associated with soil erosion. Cumulative water quality impacts associated with soil erosion by the proposed project would be less than significant through compliance with regulatory requirements including: the El Dorado County Grading Ordinance, Storm Water Management Plan, Statewide General Permit for Small Municipalities, and Statewide General Permit for Construction Discharges (all requiring revegetation of disturbed areas, and implementation of BMP's for erosion control in accordance with Resource Conservation District recommendations, including storm drain outlet protection, overside drains, rip rap, lined ditch and vegetation practices). Therefore, the proposed project is anticipated to have a less than significant impact on cumulative geophysical conditions in the region.

Hazards and Hazardous Materials

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on human health and safety (which includes hazardous materials transportation safety, electromagnetic fields, naturally occurring asbestos, and wildland fire exposure) due to planned development as site-specific. The Proposed Project is not expected to result in any site-specific public health or hazard impacts. The project is expected to have no impact on cumulative hazard conditions.

Hydrology and Water Quality

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on hydrology and water quality due to planned development. The proposed project would contribute to minimal increased storm drainage flows in the project area and would not negatively impact surface water quality. The project includes improvements to the drainage infrastructure, and adherence to the Statewide General Permit for Construction Discharges and the County's NPDES General Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems, would result in a less than significant impact to hydrology and water quality. The proposed project would not violate any water quality standard and would not increase the risk of flooding in the project area. Therefore, the project would not contribute to cumulative surface or groundwater impacts.

Land Use and Planning

As described in this Initial Study, the proposed project consists of the development of a mixed use trail. No land use impacts were identified for this project; therefore, the proposed project would not contribute to cumulative impacts associated with land use that were identified in the 2003 El Dorado County General Plan EIR. The proposed project is anticipated to have no impact on cumulative land use conditions in the region.

Mineral Resources

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on mineral resources due to planned development as site-specific. The proposed project is not expected to result in any site-specific significant impacts to mineral resources. Additionally, the project is expected to have no impact on mineral resources under cumulative conditions.

Noise

The El Dorado County General Plan EIR (2003) discusses the cumulative effects on noise levels outside of the regional freeway and U.S. 50 corridors due to planned development as site-specific. Construction contractors will be required to conduct construction activities in compliance with the El Dorado County General Plan Noise Element. Due to compliance with these policies, the proposed project would have a less than significant cumulative impact to the project area.

Population and Housing

As described in this Initial Study, the proposed project consists of development of a mixed use trail. No new construction of housing or removal of existing housing is proposed in association with the project. The proposed project is anticipated to have no impact on cumulative population and housing conditions in the region.

Public Services

The project would not result in a significant effect on public services and is not expected to contribute to cumulative public service impacts.

Recreation

The project would not directly or cumulatively affect the use of parks or other recreation facilities. Development of the proposed project would further Goal 1 of the El Dorado County Transportation Commission's 2005 Bicycle Transportation Plan, which states, "Develop a bicycle transportation system that enhances the safety and convenience of bicycling to neighboring jurisdictions, employment centers, residential neighborhoods, campgrounds, parks, education, commercial and other activity centers in El Dorado County." Because the proposed project is a segment of the comprehensive bicycle transportation system proposed for El Dorado County, development of this segment of the El Dorado Trail is considered a beneficial cumulative recreational impact.

Transportation/Traffic

As described in Section 4.14 of the Initial Study, the proposed project would result in development of a mixed use trail. The project is not anticipated to result in changes

in levels of service on area roadways or generate additional vehicular traffic; therefore, the proposed project would result in a less than significant transportation/traffic impact.

Utilities and Service Systems

Construction activities related to the proposed project may result in temporary impacts to utilities and service systems, including gas, electric, telephone, water and sewer facilities. The proposed project includes project commitments that require the County to coordinate with local utility providers early in the planning process to ensure that existing infrastructure in the project area is not damaged during construction activities, and that planned improvements to the underground utilities in the project area are coordinated with the roadway improvements.

c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

Less than Significant. The project would provide a mixed use trail for use by recreationists, such as bicyclists and hikers. The project would not result in substantial direct or indirect adverse effects from noise, either during project operation or construction, nor would it result in impacts to air quality, water quality, or utilities and public services. Therefore, the project would have a less than significant impact on human beings.

5 Supporting Information Sources

Blackburn Consulting. 2008. Preliminary Geotechnical Report, Northside School Class 1 Bike Path Project, El Dorado County, California. June 2008.

California Environmental Quality Act (CEQA) Statutes (Public Resources Code Section 21000, et seq.)

California Fire Alliance. 2004. Fire Planning and Mapping Tools. Available at: http://wildfire.cr.usgs.gov/fireplanning/. Accessed on: May 15, 2007.

County of El Dorado Grading, Erosion and Sediment Control Ordinance (Ordinance No. 3883, amended Ordinance Nos. 4061, 4167, 4170)

County of El Dorado. 2005. Agricultural Preserves.

El Dorado County Air Quality Management District CEQA Guide to Air Quality Assessment (2002)

El Dorado County General Plan Draft Environmental Impact Report (2003 and 2004)

Volume I - Comments on Draft Environmental Impact Report

Volume II - Response to Comment on DEIR

Volume III - Comments on Supplement to DEIR

Volume IV - Responses to Comments on Supplement to DEIR

Volume V - Appendices

El Dorado County General Plan: A Plan for Managed Growth and Open Roads; a Plan for Quality Neighborhoods and Traffic Relief (2004)

Padre Associates, Inc. 2008. Natural Environment Study, Northside School Bike Path Project.

Peak & Associates. 2008. File data.

Soil Survey of El Dorado Area, California (1974)

Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act (Section 15000, et seq.)

Appendix A

Mitigation Monitoring Plan

Mitigation Monitoring Plan

for the

Northside Bicycle Path Project

CEQA Lead Agency:

El Dorado County

Prepared: June 2008

Adopted by Board of Supervisors on: _____

INTRODUCTION

Purpose

El Dorado County (County) has prepared a Mitigated Negative Declaration (MND) for the proposed Northside Bicycle Path Project. The MND identified seven mitigation measures that are required to avoid potentially significant impacts of the proposed project or to reduce impacts to less-than-significant levels. This Mitigation Monitoring Plan (MMP) identifies each of the mitigation measures that must be implemented in association with the project, if adopted by the Board of Supervisors, upon adoption of the MND. This document lists each individual impact for which mitigation measures were identified in the project MND, presents each corresponding mitigation measure, identifies the implementation process for each mitigation measure, identifies criteria to determine the effectiveness of mitigation implementation, defines the time frame for implementation, and provides signed verification of the party responsible for monitoring and reporting the implementation of each measure. This MMP will be used by the County to ensure implementation of the mitigation requirements of the project and to verify that all required mitigation measures are incorporated into the project.

El Dorado County, as the lead agency in CEQA compliance, will be responsible for overseeing implementation and administration of this MMP. The County will designate a staff member to manage the MMP. Duties of the staff member responsible for program coordination would include conducting routine inspections, reporting activities, coordinating with the project contractor, and ensuring enforcement measures are taken if necessary.

Regulation

California Public Resources Code Section 21081.6 requires public agencies to adopt mitigation or reporting plans when they approve projects requiring preparation of a MND that identifies significant environmental impacts. The reporting and monitoring plans must be adopted when a public agency makes its findings pursuant to the California Environmental Quality Act (CEQA) so that the mitigation requirements can be made conditions of project approval.

Format

The MMP outlines the impacts and mitigation measures described in the project MND. Each of the impacts discussed within this MMP are numbered based upon the sequence in which they are discussed in the MND.

A summary of each impact with the corresponding specific mitigation measure identified within the MND is provided. Each mitigation measure is followed by an implementation description, the criteria used to be used to determine the effectiveness of the mitigation, implementation timing and the party responsible for monitoring the implementation of

the measure. Although the implementation of certain measures may be the responsibility of County contractors, the ultimate monitoring and confirmation responsibility lies with County staff. Finally, each measure also contains a "Verified By" signature line which will be signed by the County project manager when the measure has been fully implemented and no further actions or monitoring is necessary for the implementation or effectiveness of the measure.

Impact 4.3(d): **The project has the potential to expose sensitive receptors to substantial pollutant concentrations.**

Mitigation Measure 1: Earthwork performed within areas identified as "More Likely to Contain Asbestos" and "Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line" (as shown on Naturally Occurring Asbestos Review Area Map (July 22, 2005) shall be in accordance with Section 19 of the Standard Specifications and Section 19-910 of the 2006 Standard Special Provisions. In addition, a worker health and safety program shall be developed and implemented in accordance with all regulatory requirements, including California Occupational Safety and Health Administration requirements.

Implementation: The County will include language in the construction specifications that construction shall be completed in accordance with applicable standards, regulations, and guidelines relating to areas potentially containing naturally occurring asbestos.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the compliance with Mitigation Measure 1.

Timing: Pre-Construction and Construction Phases

Verified By: _____ **Date:** _____
County Project Manager

Impact 4.4(a): The Proposed Project has the potential to impact Foothill yellow-legged frog (and California red-legged frog) habitat.

Mitigation Measure 2: The County shall implement the following measures for FYLF (and CRLF) avoidance and impact minimization:

- Wetted channel segments, areas of riparian scrub, and other Environmentally Sensitive Areas within the project area, but outside the construction impact area, shall be staked and flagged to avoid encroachment by equipment and construction crews. Environmentally Sensitive Areas within the construction impact area that can be avoided by equipment and crews shall also be staked and flagged to minimize effects of construction.

- A qualified biologist shall conduct a FYLF/CRLF survey of the project site 48 hours before the onset of work activities. If any life stage of the FYLF/CRLF is found, and these individuals are likely to be killed or injured by work activities, the approved biologist shall be allowed sufficient time to move them from the site before work activities begin. The biologist shall relocate the FYLFs/CRLFs the shortest distance possible to a location that contains suitable habitat and will not be affected by activities associated with the proposed project.

- During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

- All refueling, maintenance, and staging of equipment and vehicles shall occur at least 60 feet from riparian habitat or water bodies and not in a location from where a spill would drain directly toward aquatic habitat. The monitor shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the County shall ensure that a plan is in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

- Project sites that are temporarily impacted shall be revegetated with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. This measure shall be implemented in all areas disturbed by activities associated with the project, unless the County determines that it is not feasible or practical. (For example, an area disturbed by construction that would be used for future activities need not be revegetated.)

- The number of access routes, size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas shall be established to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to FYLF/CRLF habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

- The County shall attempt to schedule work activities for times of the year when impacts to the FYLF/CRLF would be minimal. To control sedimentation during and after project implementation, the County and its contractors shall implement Best Management Practices outlined in any authorizations or permits, issued under the authorities of the Clean Water Act that it receives for the specific project. If best management practices are ineffective, the County shall attempt to remedy the situation immediately, in consultation with the USFWS.

- Although unlikely, if a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 0.2 inches to prevent FYLFs/CRLFs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. The methods and materials used in any dewatering shall be determined by the County in consultation with the USFWS on site-specific basis. Upon completion of construction activities, any diversions or barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate. Alteration of the streambed shall be minimized to the maximum extent possible; any imported material shall be removed from the streambed upon completion of the project.

- The monitoring biologist shall permanently remove any individuals of exotic species, such as bullfrogs (*Rana catesbeiana*), crayfish, and centrarchid fishes from the project area, to the maximum extent possible. The biologist shall be responsible for ensuring his or her activities are in compliance with the California Fish and Game Code.

- To ensure that diseases are not conveyed between work sites by the biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times.

Implementation: The County will retain the services of a qualified biologist to conduct pre-construction FYLF/CRLF surveys and will implement the measures as described above.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the implementation of the above referenced measures.

Timing: Pre-Construction and Construction Phases

Verified By: _____ **Date:** _____
County Project Manager

Impact 4.4(b): **The Proposed Project would permanently impact 0.32 acre of wetlands or waters of the U.S.**

Mitigation Measure 3: Prior to disturbing any of the wetland features within the project area, the Delineation of Waters of the United States prepared for the proposed project shall be submitted to the Corps and the appropriate Section 404 permit shall be acquired. Additionally, the County shall obtain a Section 401 permit from the California Regional Water Quality Control Board prior to disturbance. Any waters of the U.S. that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps' mitigation guidelines. Based on a projected combined loss of approximately 0.32 acre of waters and wetlands and an assumed replacement-to-loss compensation ratio of 3:1, the County shall acquire 0.96 acre of mitigation credits. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the Corps. The County shall obtain a Streambed Alteration Agreement from CDFG, pursuant to Section 1600 of the CDFG Code, for each stream crossing and any other activities affecting the bed, bank or associated riparian vegetation of the stream. The County shall abide by the conditions of any executed permits.

Implementation: The County will prepare and submit permit applications to the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board and the California Department of Fish and Game. The County will abide by all conditions of any executed permits.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying execution of permits for the regulatory agencies.

Timing: Pre-Construction Phase

Verified By: _____ **Date:** _____
County Project Manager

Impact 4.5(a, b): The project has the potential to cause adverse change to a historical resource.

Mitigation Measure 4: The County shall retain the services of a qualified archaeologist to complete a Phase II archaeological investigation. The Phase II investigation would be used to determine the limits, density, and eligibility status for inclusion on the National Register of Historic Properties, if the County and Caltrans determine that this type of analysis is appropriate for compliance with applicable regulations. If the Phase II investigations determine that a significant site would be affected, the County will conduct a Phase III data recovery investigation to determine the site significance. If the Phase III data recovery investigation determines that a significant historic site would not be affected, then the proposed undertaking would have no effect on historical resources and no further measures would be necessary. If the Phase III data recovery investigation determines that the proposed undertaking would have an adverse effect on historical resources, project construction would be postponed until such time as all requisite approvals are received from the California State Historic Preservation Officer and Caltrans.

Implementation: In the event that Phase II investigative work indicates that a significant site will be affected by the project, Phase III data recovery will be conducted to determine site significance.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the methods used by, conditions observed by, and conclusions reached during the Phase II and Phase III investigations (as applicable).

Timing: Pre- Construction Phase

Verified By: _____ **Date:** _____
County Project Manager

Impact 4.5(c): Construction activities could potentially disturb a paleontological resource.

Mitigation Measure 5: If paleontological resources are encountered during construction activities, all work within 25 feet of the discovery shall be redirected until a qualified paleontologist has evaluated the resources, prepared a fossil locality form documenting them, and made recommendations regarding their treatment. If paleontological resources are identified, it is recommended that such resources be avoided by project activities. Paleontologists shall be empowered to halt construction activities within 25 feet of the discovery to review the possible paleontological material and to protect the resource while it is being evaluated. If avoidance is not feasible, adverse effects to such resources shall be mitigated. Mitigation can include data recovery and analysis, preparation of a report and the accession of fossil material recovered to an accredited paleontological repository.

Implementation: In the event that a paleontological resource is discovered during project construction, the County will retain the services of a qualified paleontologist to assess the find and implement appropriate measures.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the methods used by, conditions observed by, and conclusions/recommendations of the qualified paleontologist retained by the County in the event construction activities unearth a paleontological resource.

Timing: Construction Phase

Verified By: _____ **Date:** _____
County Project Manager

Impact 4.5(d): **Construction activities could potentially disturb human remains.**

Mitigation Measure 6: If human bone, or bones of unknown origin, is found during project construction, all work shall stop in the vicinity of the find and the El Dorado County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify the person it believes to be the most likely descendant. The most likely descendant shall work with the County to develop a program for reinterment of the human remains and any associated artifacts. No additional work shall take place within the immediate vicinity of the find until the identified appropriate actions have been completed.

Implementation: In the event that human bone or bones of unknown origin are discovered during project construction, the El Dorado County Coroner will be immediately notified. If it is discovered that the remains are Native American, the County will develop a program for re-internment in coordination with the most likely descendant.

Effectiveness Criteria: The County will prepare and keep on file documentation verifying the methods used by, conditions observed by, and conclusions/recommendations of the qualified archaeologist retained by the County in the event construction activities unearth human remains.

Timing: Construction Phase

Verified By: _____ **Date:** _____
County Project Manager