

DRAFT

Initial Study/

Mitigated Negative Declaration

for the

**Salmon Falls Road South of
Glensk Lane Realignment**

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



November 2011

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List of Acronyms/Abbreviations

Acronym/Abbreviation	Definition
ACIP	Airports Capital Improvement Program
APE	area of potential effects
ATCM	Air Toxic Control Measure
BMP	best management practice
CAA	Clean Air Act
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
CNDDDB	California Natural Diversity Database
CO	carbon monoxide
CO ₂	carbon dioxide
CORP	Capital Overlay and Rehabilitation Program
CRLF	California red-legged frog
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
EDCAQMD	El Dorado County Air Quality Management District
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FYLF	Foothill yellow-legged frog
GHG	greenhouse gas emissions
JCB	j.c. brennan & associates, Inc.
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MMRP	Mitigation Monitoring and Reporting Plan
MND	Mitigated Negative Declaration
mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
OPR	Office of Planning and Research
OSHA	Occupational Safety and Hazards Administration
OWMP	Oak Woodland Management Plan
p.p.v.	Peak particle velocity
PG&E	Pacific Gas & Electric
PM ₁₀	particulate matter less than 10 microns in diameter
ppb	parts per billion
ppm	parts per million
ROG	reactive organic compounds
RR	Rural residential
RWQCB	Regional Water Quality Control Board
SO ₂	sulfur dioxide
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TAHOE EIP	Environmental Improvement Program
TCBB	tricolored blackbirds
USFWS	U.S. Fish and Wildlife Service
µg/m ³	micrograms per cubic meter

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1 Introduction

El Dorado County is conducting this California Environmental Quality Act (CEQA) review of the proposed realignment of approximately 600 feet of Salmon Falls Road near its intersection with Glenesk Lane, located approximately 9.25 miles north of U.S. Highway 50 and approximately 3.0 miles south of State Route 49 in western El Dorado County. The El Dorado County Department of Transportation (DOT) 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.). 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).

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 proposed 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 and Reporting Plan**—Contains the Mitigation Monitoring and Reporting Plan (MMRP) MMRP Monitoring and Reporting 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.

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2 Initial Study Findings

1. Project Title:

Salmon Falls Road South of Glenesk Lane Realignment

2. Lead agency name and address:

El Dorado County, Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

3. Contact person and phone number:

Paul Hom, C.E. (530) 621-5925

4. Project location:

The project area is approximately 1.4 miles northeast of the Salmon Falls Bridge crossing of the South Fork of the American River and approximately 9.25 miles north of U.S. Highway 50 and approximately 3.0 miles south of State Route 49. (See **Figure 1** in **Section 3** of this Initial Study)

5. Project sponsor's name and address:

N/A

6. General Plan designation:

Rural Residential with an Important
Biological Corridor Overlay

7. Zoning:

Estate Residential Ten-Acre

8. Description of project:

The proposed project involves the realignment and widening of approximately 600 feet of Salmon Falls Road. The proposed project would widen Salmon Falls Road from approximately 23 feet to approximately 32 feet and would realign Salmon Falls Road to reduce safe speed variations throughout the project area by developing a consistent radius. A metal guardrail would be installed adjacent to the northbound travel lane immediately south of Glenesk Lane. 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 approximately 9.25 miles north of U.S. Highway 50 and approximately 3.0 miles south of State Route 49 within an area predominated by wooded grasslands and pastures with homes scattered on five-acre parcels or larger in western El Dorado County. Adjacent land use designations of the 2004 *El Dorado County General Plan* are comprised primarily of agricultural lands (AL) with an Important Biological Corridor Overlay.

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

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	Air Quality
✓	Biological Resources	✓	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

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3 Project Description

3.1 Project Location and Land Use Designations

The Salmon Falls Road South of Glenesk Lane Realignment¹ (proposed project) is located in the rural area of western El Dorado County (see **Figure 1**), approximately 9.25 miles north of U.S. Highway 50 (U.S. 50) and approximately 3.0 miles south of State Route 49. Glenesk Lane intersects with Salmon Falls Road within the project area (see **Figure 2**). The full length of the project area is approximately 600 feet, between Mile Posts 7.79 and 7.99.

Salmon Falls Road is a rural minor arterial that runs essentially south to north, from Green Valley Road, in the community of El Dorado Hills, north to State Route 49 in the community of Pilot Hill. Designated land uses adjacent to the project area as identified in the 2004 *El Dorado County General Plan* are rural residential (RR) uses with an Important Biological Corridor Overlay. Existing land uses surrounding the project area include wooded grasslands and pastures with occasional homes on five-acre parcels or larger.

3.2 Project Purpose and Objectives

The County has identified the project area as a location with above average accident rates (8 accidents between 2007-2009). As a result of this high accident rate, the County was awarded a grant from the Highway Safety Improvement Program (HSIP), a federal safety grant program administered by the Federal Highway Administration (FHWA)

The following safety problems were identified within the project area:

1. The existing curve has a substandard radii which is a primary factor contributing to vehicles crossing over the centerline into oncoming traffic, or hitting the existing metal beam guard rail or fence on the east side of the curve or into the rock outcropping adjacent to the southbound travel lane;
2. Little or no shoulders exist along the curve;
3. The fog line is painted approximately six inches from the edge of pavement;
4. Portions of the edge of pavement adjacent to the northbound travel lane abut metal beam guardrail with no shoulder adjacent to an 11-foot lane;
5. Portions of the edge of pavement adjacent to the southbound travel lane abut a near vertical rock outcropping with no shoulder adjacent to an 11-foot lane; and
6. The project area offers poor sight distance due to the tight radius horizontal curve

¹ The proposed project is included in the *Department of Transportation Adopted 2010 Capital Improvement Program (CIP) for West Slope Road/Bridge Capital Overlay and Rehabilitation (CORP), Environmental Improvement Program (TAHOE EIP), Airports (ACIP), Parks and Trails* as the Salmon Falls Road at Glenesk Ln - Realignment (Project Number 73362). The proposed project referenced in this MND, although entitled the Salmon Falls Road South of Glenesk Lane Realignment, is actually County CIP Project Number 73362.

with near vertical rock outcropping to the inside, which severely limits sight distance (El Dorado County Department of Transportation, 2009).

In 2003, a safety improvement study was conducted by El Dorado County Department of Transportation of the curve south of Glenesk Lane. This study was conducted in response to litigation regarding a fatal accident involving a motorcyclist, driving southbound on Salmon Falls Road, who lost control of his motorcycle on the curve, struck the guardrail and died as a result of his injuries.

Based on Collision History Data for the project area, from 1999-2009 20 accidents, including 15 injury accidents and one fatality, have occurred within the project area. According to California Highway Patrol Traffic Collision Reports, the primary cause of the collisions is motorists driving at unsafe speeds. The majority of vehicles involved in the accidents were motorcycles (eleven of the 20 accidents or 55 percent); five of the 20 accidents (or 25 percent) were broadside. The most recent collision data for the period from 2007 to 2009 reported a total of eight accidents with four injuries. Of the eight accidents, four involved motorcycles, three involved “hit objects,” and one was a “head-on” collision.

This roadway segment has been identified by the El Dorado County Department of Transportation in the Adopted 2010 Capital Improvement Program as requiring safety improvements.

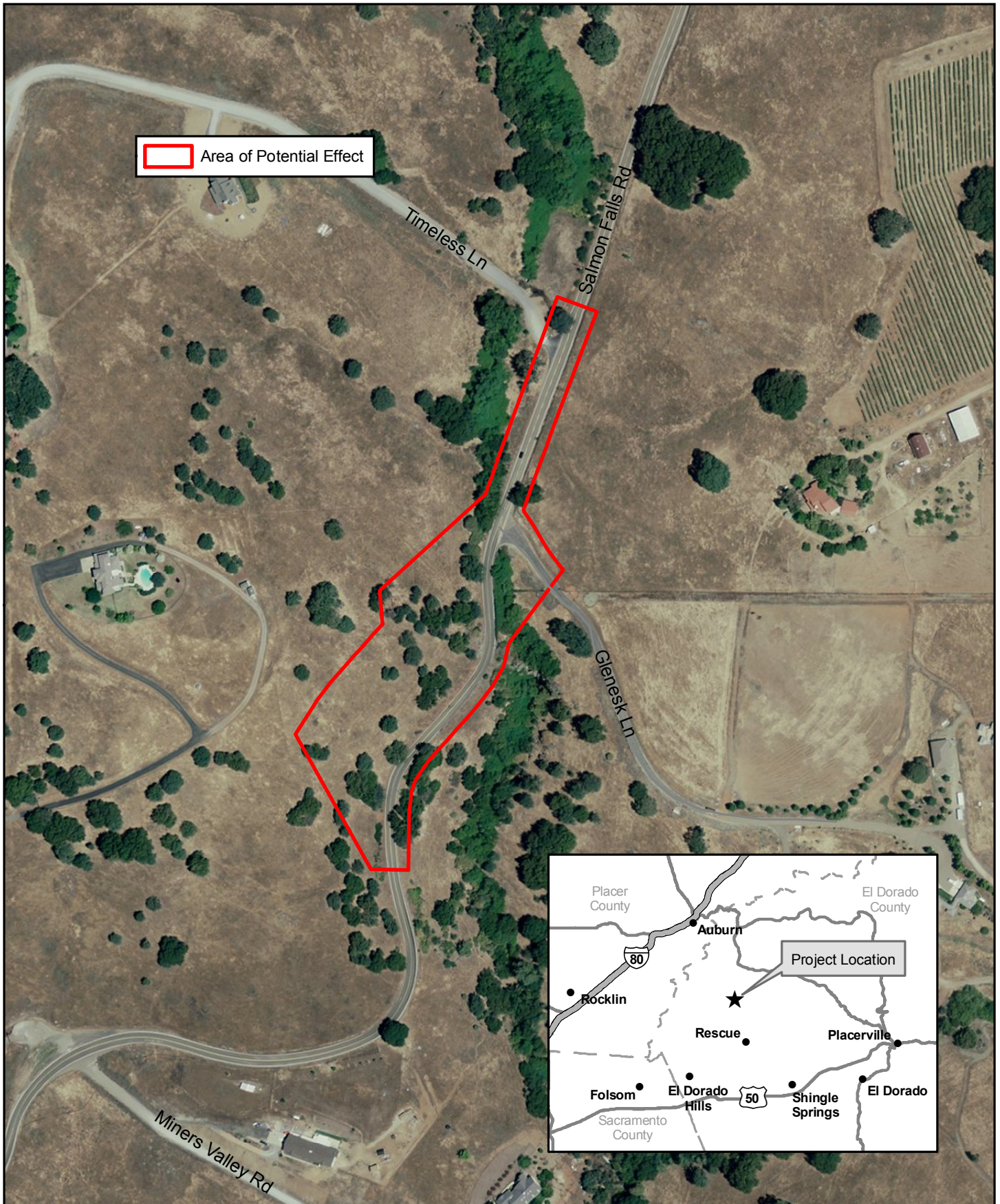
The objective of the proposed project is:

To improve traffic safety along Salmon Falls Road between Mile Post 7.79 and 7.99

3.3 Existing Signage and Barriers

Signage has been installed within and adjacent to the vicinity of the project area. Southbound travelers encounter left reverse turn warning signs with 20 mile per hour (mph) speed advisory signs and three chevron symbol signs located along the outside of the curve adjacent to the guardrail. Northbound travelers encounter a left turn warning sign with a 20 mph speed advisory sign located in advance of the curve, a left arrow sign, and four signs marking the railing walls of the box culvert located immediately south of Glenesk Lane.

Approximately 380 feet of guardrail is located along the outside curve east of the northbound travel lane. The northern terminus of the guardrail ends approximately 150 feet south of a box culvert. The guardrail was installed to prevent run-off-the-road accidents which could result in serious injury as there is a steep embankment that descends to an ephemeral stream.

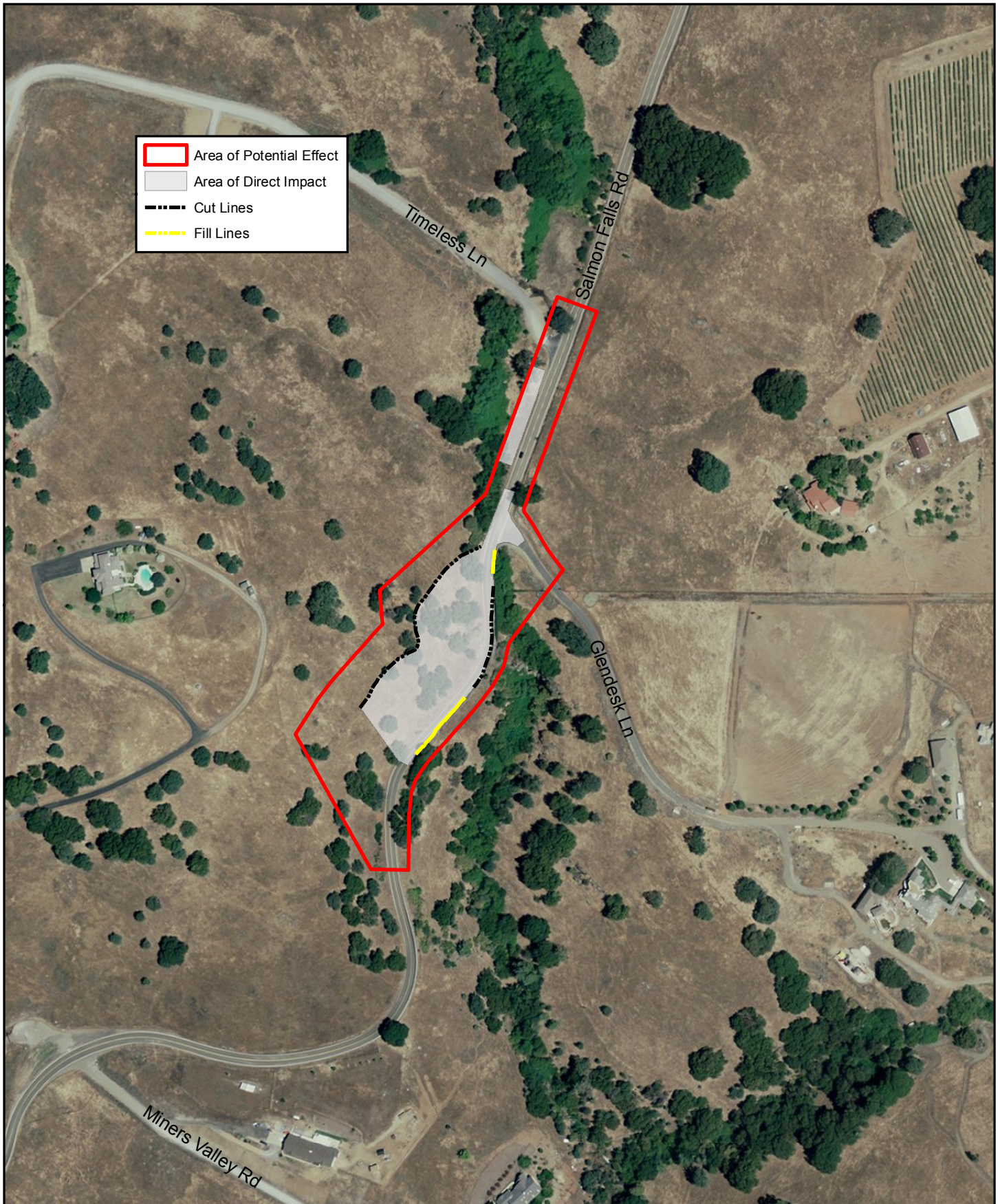


Area of Potential Effect

Data Source: El Dorado County 2011; ESRI 2011.

Figure 1: Project Location
Salmon Falls Road Realignment Project





Data Source: El Dorado County 2011; ESRI 2011.

**Figure 2: Proposed Project
Salmon Falls Road Realignment Project**



0 100 200 400 Feet

3.4 Proposed Improvements

3.4.1 Roadway Modifications

The proposed project includes the realignment of Salmon Falls Road approximately 17 feet west of the existing roadway alignment between Mile Post 7.79 and Mile Post 7.99, thereby increasing the horizontal and vertical curve radius of the roadway, improving sight distance, and improving shoulder width. The project also proposes to widen the shoulder width from less than one foot on each side to four feet on the north- and southbound sides. (See **Figure 2.**)

The realigned traffic lanes would be restriped to a minimum of 10 feet wide in both the northbound and southbound directions. The proposed project would attempt to retain the existing guard rail and may involve the installation of additional guard rail. A retaining wall may also be installed on the west side of the road, and property fencing would be replaced if disturbed during construction activities.

The proposed project could require earthwork quantities of up to 17,400 net cubic yards of cut. Excess dirt would be hauled away from job site.

3.4.2 Lighting, Utilities and Drainage Facilities

There are no existing lighting fixtures adjacent to the project roadway alignment. Lighting fixtures are limited to exterior light fixtures at the private residences adjacent to the project area. The project does not propose the installation of lighting features adjacent to the project roadway alignment.

One overhead utility pole is located adjacent to the southbound travel lane at the northern portion of the Salmon Falls Road/Glenesk Lane intersection. The overhead utility pole is located outside of the project area. The proposed project does not include utility relocation and/or replacement. In the event that utility relocation/replacement is required, coordination with the appropriate utility service provider would be conducted prior to utility relocation to minimize utility service disruption.

A rock-lined roadside ditch would be installed along the west and east side of the realigned roadway. Approximately 450 feet of rock-lined roadside ditch would be installed on the west side of the roadway, while approximately 175 feet of rock-lined roadside ditch would be installed on the east side of the roadway.

3.4.3 Vegetation Removal and Replacement

Construction activities associated with the roadway realignment would require some vegetation removal, including California annual grassland species and 52 trees with a diameter of 5 inches or greater at breast height (45 oak trees (*Quercus* sp.) and seven California buckeyes (*Aesculus californica*)). Plants selected for revegetation would be appropriate for the project area and would not include any noxious or invasive weeds. Locally collected plant materials would be used to the extent practicable. Invasive, exotic plants would be controlled to the maximum extent practicable. The proposed project does not include landscaping; however, areas graded during construction activities but not paved would be revegetated to standard for erosion control.

3.4.4 Proposed Signage

The proposed project would include the installation of signage within the project area. Signage may include, but would not be limited to, turn advisory signage, speed limit signs, chevron alignment signs to alert motorists of the upcoming curve, and one-directional arrow sign.

3.4.5 Right-of-Way Requirements

The proposed project would require that DOT acquire, either by easement or fee, rights of way for development of the realigned roadway segment. The exact amount of area to be acquired will be determined when final design is complete. The project would also require the acquisition of slope, drainage, and public utility easements and temporary construction easements (for construction purposes) from adjacent properties. These acquisitions would be negotiated with property owners who would be compensated for their acquired property. The County would obtain temporary easements from adjacent parcels to accommodate vehicle and equipment operations during project construction.

3.4.6 Project Construction

3.4.6.1 Blasting Activities

Blasting activities would be conducted by a qualified and licensed blaster, and all blasting activities would be monitored by a professional geologist, certified engineering geologist, certified geophysicist or licensed engineering consultant. Blasting activities would be conducted pursuant to a controlled blasting plan, approved by the County, which would identify procedures for performing and monitoring test blasting and controlled blasting.

Blasting activities would require approximately one week. A full road closure (for up to four hours daily) would be required during detonation and clean up. During blasting activities, the road may be closed and public traffic stopped for periods not to exceed 20 minutes. In the event of a misfire, additional time would be allowed for a licensed blaster to safely detect and clear any misfired charges. After one closure is made, accumulated traffic would be allowed to pass through the work area before another road closure.

Area residents and emergency response personnel would be notified at least five working days in advance of the blasting activities, and signage would be installed in advance to

alert area motorists to road closures and blasting activities. During construction activities, a traffic control plan would be implemented that details the sequence of blasting operations and the coordination with reopening of lanes to public traffic. Blasting and related traffic control would be restricted to Monday through Friday between 7:00 a.m. and 7:00 p.m.

During blasting operations portable changeable message signs would be placed in each direction of travel. Portable changeable message signs would be placed a minimum of five calendar days prior to the blasting activities.

3.4.6.2 Construction Phasing

For bidding purposes the County proposes to construct the improvements in three consecutive phases. The contractor may propose an alternate construction phasing to the County for approval. As proposed, the County's first phase of construction, the southbound lane of Salmon Falls Road would be closed, while northbound lane of Salmon Falls Road would remain open with reversible traffic control and a temporary traffic signal. Northbound Salmon Falls Road would be a minimum 10-foot width and barricaded with K-rails. During the first phase of construction, westbound Glenesk Lane would be closed for repaving.

During the second phase of construction, northbound Salmon Falls Road would be closed, while southbound Salmon Falls Road would remain open with reversible traffic control and a temporary traffic signal. Southbound Salmon Falls Road would be a minimum 10-foot width and barricaded with K-rails. During the second phase of construction, eastbound Glenesk Lane would be closed for repaving.

During the third phase of construction, a 300-foot segment of northbound Salmon Falls Road would be closed for construction activities immediately west of the Salmon Falls Road/Glenesk Lane intersection. Southbound Salmon Falls Road would remain open with reversible traffic control and a temporary traffic signal. Access to and from Glenesk Lane would be accommodated during the third phase of construction.

3.4.6.3 Construction Procedures

The El Dorado County DOT would 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 would provide construction inspection and would be responsible for verifying mitigation measure implementation. The proposed project would 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 following are a combination of standard and project-specific procedures/requirements applicable to project construction:

- Construction contract specifications 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. A full road closure (for up to four hours daily during one week) for blasting activities would be required during detonation and clean up. The traffic management plan would require that area residents and emergency response personnel be notified in advance of the blasting activities, and signage would be installed in advance to alert area motorists to road closures and blasting activities. During subsequent phases of the proposed project, minor traffic stoppages or delays may be allowed if necessary during project construction;
- Special contract provisions will require compliance with El Dorado County Air Quality Management District (EDCAQMD) Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos;
- Contract provisions will require compliance with the California Air Resources Board Airborne Toxic Control Measure (ATCM) 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);
- Construction contract specifications 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;
- Construction contract specifications 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 or newer), 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;
- The project will comply with General Plan Policy 6.5.1.11 pertaining to construction noise; and
- If necessary, night time construction shall be conducted to minimize traffic disruption and will comply with the above ordinances. No night time blasting will occur.

The County anticipates that construction of the proposed project will require the

construction contractor to close one of the two traffic lanes during construction activities, resulting in a reversible control (both directions alternating use of a single lane) lane closure. Diversions of traffic will be signed; and barriers, striping, and cones will be used as necessary to guide traffic and delineate temporary lanes. Flagpersons will monitor and guide traffic during periods of reversible control lane closure, equipment movement, or when construction activities are occurring near traffic lanes to ensure public and worker safety.

3.4.7 Construction Schedule

It is anticipated that construction of the proposed project will commence in Spring/Summer 2012 and will require approximately four months to complete.

3.5 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.

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.
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 <i>et seq.</i>)	For storm water discharges associated with industrial activity, unless covered by individual NPDES permit.
	Waste Discharge Requirements. (Water Code 13000 <i>et seq.</i>)	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.
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 is approximately 9.25 miles north of U.S. Highway 50 and approximately 3.0 miles south of State Route 49 within an area predominated by wooded grasslands and pastures with homes scattered on five-acre parcels or larger. The project area consists of an existing roadway with oak trees and one overhead utility pole located adjacent to the existing roadway alignment. Approximately four residences are located within 650 feet of the proposed project area. The nearest residence is approximately 530 feet east of the proposed project area. 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?*

Less Than Significant. The proposed project area is located in an area designated as an “Important Public Scenic Viewpoint” (#15) in the El Dorado County General Plan. The designation applies to southbound Salmon Falls Road from Highway 49 to the Folsom Reservoir. The area is designated as a *scenic view*, which means the surrounding middle ground and background features, such as rolling hills and ridgelines, offer scenic value. The area is also designated as a *scenic resource*, which provides views to the south and the west of the American River Canyon and the Folsom Reservoir. The American River is approximately 1.4 miles southwest of the proposed project area. The proposed project would result in a temporary alteration of the scenic vista during the construction phase and would result in a relatively minor permanent physical change to the visual characteristics of the

immediate project area by widening and realigning the roadway. The roadway realignment would not obstruct views of the middle ground and/or background nor would the project detract from views of American River Canyon or Folsom Reservoir, and therefore, would result in a less-than-significant impact on a scenic vista.

The proposed project would require the removal of up to 52 trees (45 oak trees and 7 buckeye trees) and would require the excavation of the rock outcropping on the west side of the existing roadway alignment to accommodate the proposed realignment. These features would result in a noticeable change in the character; however, the proposed roadway realignment would not obstruct views of the middle ground and/or background, 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. 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 14.0 miles northeast of the proposed project area. As such, 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, the project would result in a relatively minor physical change to the visual characteristics of the immediate project area by realigning the roadway, installing a guardrail and gabions that range in size from 4 to 8 feet, and removing up to 45 oak trees, ranging in size from approximately 5 inches to 19 inches in diameter and 7 buckeye trees, ranging in size from approximately 4 inches to 8 inches in diameter. The removal of trees would be apparent from the residential structure on the parcel and could result in a moderately adverse change in visual character. The proposed project features (e.g., roadway realignment, installation of guardrail and gabion, and tree removal) would result in a slight noticeable change in the character from the roadway; 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 installation of new light sources. Therefore, the proposed project would result in no impact to light or glare.

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 areas adjacent to the project area currently include rural residential uses. The California Department of Conservation Farmland Mapping and Monitoring Program “El Dorado County Important Farmland 2008” map identifies the project area with a classification of “Farmland of Local Importance” 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.

Parcels immediately adjacent to the project area are zoned “Residential Agricultural” (RA-40 and RA-80).

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. The proposed project would require right-of-way acquisition; however, none of the adjacent properties are designated as agricultural land. No agricultural lands (including *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?*

Less Than Significant. A portion of the existing roadway is located adjacent to lands zoned as “Rural Residential”. To accommodate the roadway realignment and widening, the proposed project may require the acquisition of approximately .2 acre of lands zoned as “Rural Residential”. No lands subject to a Williamson Act contract exist within or adjacent to the project area. The proposed project would not disrupt agricultural activities and would not conflict with a Williamson Act contract; therefore, this impact is considered less than significant.

- 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 southwest.

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 the region's 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 MCAB from the Central Valley 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 (PM₁₀) 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 (NO₂)

The major sources of nitrogen dioxide (NO₂), essential to the formation of photochemical smog, are vehicular, residential, and industrial fuel combustion. NO₂ is the brown colored gas evident during periods of heavy air pollution. NO₂ increases respiratory disease and irritation and may reduce resistance to certain infections.

Sulfur Dioxide (SO₂)

The major source of sulfur dioxide (SO₂) 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. SO₂ 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 not located within an area identified on the most recent Naturally Occurring Asbestos Review Area Map as being "More Likely to Contain Asbestos" (July 22, 2005). Additionally, the County retained Youngdahl Consulting Group, Inc. to evaluate the potential presence of NOA within the project area. The Youngdahl report indicated that no detectable levels of NOA were reported by the sampling results (Youngdahl, 2011b).

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	0.07 ppm	--
Carbon Monoxide	1-Hour	35.0 ppm	20.0 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide	Annual	53 ppb	0.03 ppm
	1-Hour	100 ppb	0.18 ppm
Sulfur Dioxide	24-Hour	--	0.04 ppm
	1-Hour	0.14 ppm	0.25 ppm
PM ₁₀	24-Hour	150 µg/m ³	50 µg/m ³
PM _{2.5}	Annual	15 µg/m ³	12 µg/m ³
	24-Hour	35 µg/m ³	--
Lead	30-Day Avg.	--	1.5 µg/m ³
	Month Average	1.5 µg/m ³	--

ppm = parts per million

ppb = parts per billion

µg/m³ = Micrograms per Cubic Meter

Source: California Air Resources Board, September 8, 2010

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**.)

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 2010 designations, El Dorado County is designated non-attainment for ozone and PM₁₀.

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).

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
- PM₁₀: 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 Air Quality Management District’s *Road Construction*

Emissions Model, Version 6.3.2, as recommended in the EDCAQMD *Guide to Air Quality Assessment*. 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.

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	3.8	16.4	32.0	8.3	1.2	1.5
Grading/Excavation	10.8	91.0	81.1	10.6	3.1	1.5
Drainage/Utilities/Sub-Grade	3.7	15.3	27.9	8.5	1.3	1.5
Paving	2.3	8.7	12.8	1.1	1.0	--
Maximum (pounds/day)	10.8	91.0	81.1	10.6	3.1	1.5
Significance Criteria	82	AAQS ¹	82	AAQS ¹	N/A	N/A
Significant	No	No ¹	No	No	N/A	N/A

Notes:
¹ As noted in the EDCAQMD CEQA Guide, CO and PM₁₀ 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: 2012; Project Length (months): 4; Total Project Area (acres): 1.4; Total Soil Imported/Exported (yd³/day): 1,150. Miles per round trip for soil hauling activities: 30 miles; Number of round trips per day: 58.
 PM₁₀ estimates assume 50% control of fugitive dust from watering and associated dust control measures.
 Total PM₁₀ 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 6.3.2

Concentration	1-Hour	8-Hour
Background Concentration	1.32	0.35
Project-Related Pollutant Concentration	1.1	1.1
Anticipated Total Concentration	2.43	1.45
Ambient Air Quality Standard ¹	20.0	9.0
Project Variance from AAQS	-17.57	-7.55
Significance Determination (Significant if project variance is positive)	No	No

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 PM₁₀ 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, PM₁₀ 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 PM₁₀ emissions would also be less than significant and PM₁₀ 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 PM, CO, 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 minimal due to the limited nature of the project and short-term construction period and have been determined to be less than significant based on the information presented above. These short-term construction emissions are, therefore, not anticipated to affect applicable air quality planning.

The proposed project is not capacity increasing (i.e., the project would improve roadway safety, but would not result in an increase in motor vehicle trips), and therefore would not result in increased operational air quality emissions. The project would not support increased use of the roadway, and no new long-term 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 PM₁₀ 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. The proposed project would require the blasting of the rock outcropping west of the southbound travel lane. As discussed in Section 3.4.6.1, blasting activities would occur for approximately one week and require full road closure during detonation and clean up. Blasting activities would occur pursuant to EDCAQMD Rule 223, Fugitive Dust, and an increase in PM₁₀ emissions in excess of established thresholds are not anticipated. 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 PM₁₀ and ozone, the PM₁₀ and

ozone precursor (ROG and NO_x) emissions estimated for the project's construction 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 project would not cause any long-term increase in PM₁₀, ROG and NO_x.

- 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. 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 does not involve new uses or an expansion of use along Salmon Falls Road, 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 PM₁₀). The project would not result in increased traffic or a long-term increase in air pollutant emissions. 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. "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 predominated by wooded grasslands and pastures with occasional homes on five-acre parcels or larger. The nearest school is approximately 6.0 miles southwest of the project area (Lake Forest Elementary School). Enchanted April Bed & Breakfast Inn is located approximately 0.35 miles north of the project area. Currently, the closest residence to the project area is located approximately 530 feet east of the project area. The adjacent residence has 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. As discussed in Section 3.4.6.1, blasting activities would occur for approximately one week and require full road closure during detonation and clean up. Blasting activities would occur pursuant to EDCAQMD Rule 223, Fugitive Dust, and an increase in PM₁₀ emissions in excess of established thresholds are not anticipated. Construction-related 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 outside of areas identified on the most recent Naturally Occurring Asbestos Review Area Map as being “More Likely to Contain Asbestos” (July 22, 2005). Youngdahl Consulting Group, Inc. conducted an assessment for naturally occurring asbestos for the proposed project. Based on the Youngdahl assessment, there was no visible indication of NOA, and no NOA was detected in the samples collected from the project area. 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.

- 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.

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4.4 Biological Resources

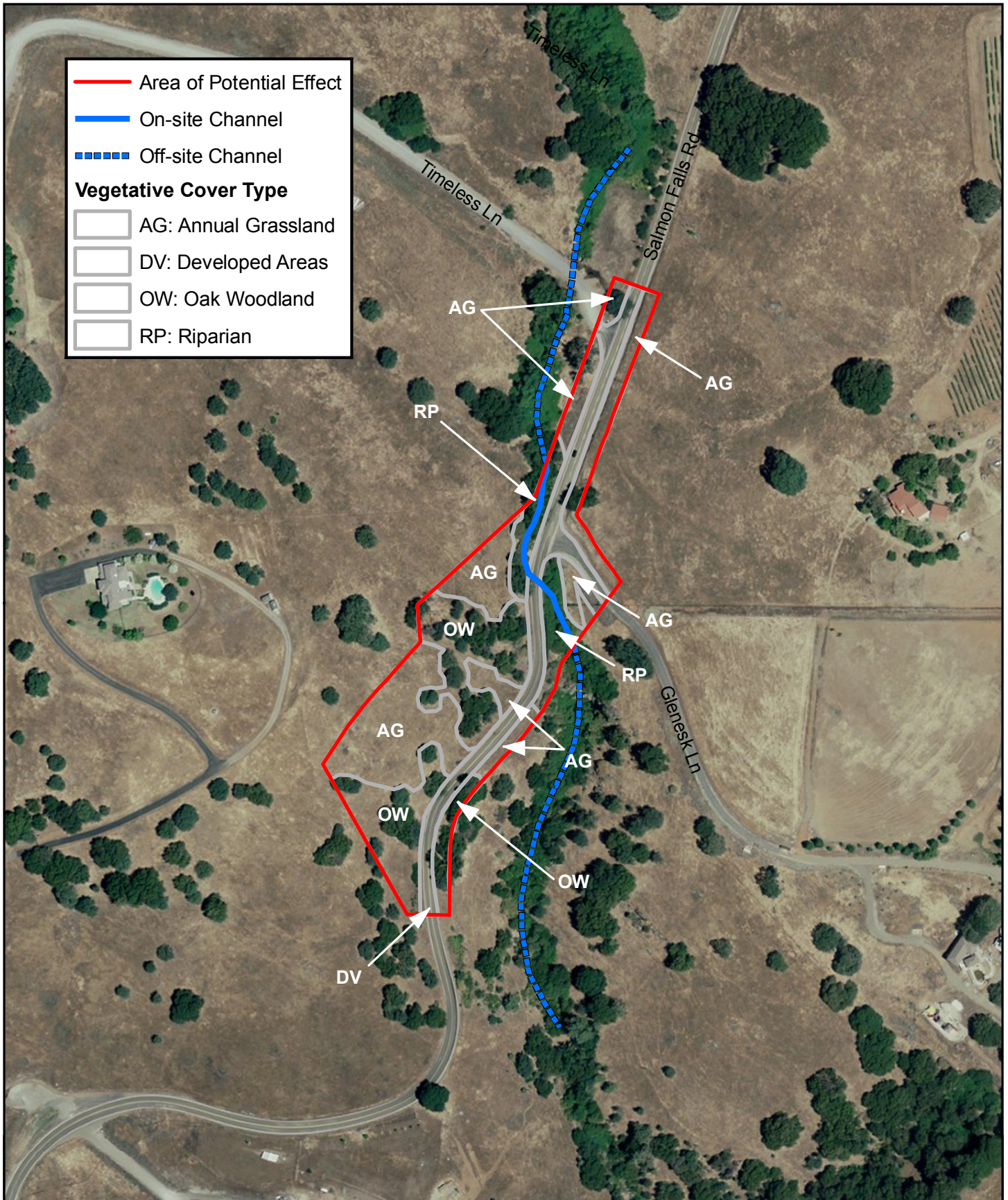
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status 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 area is located on Salmon Falls Road between Mile Post 7.79 and 7.99 in a rural residential area south of Pilot Hill. The roadway realignment is through rolling hill terrain adjacent to rural residential properties in the form of large private parcels and ranches.

One intermittent channel (Peacock Ravine Creek) occurs within the project area. The channel flows through a box culvert at the northern limits of the project area. The channel width varies from approximately 6 feet at the culvert to 12 to 15 feet upstream of the culvert and is not visible downstream of the culvert due to extensive vegetative cover. The channel flows in a northerly to southerly direction and flows through a box culvert in the northern portion of the project area. The channel supports a riparian corridor of trees and shrubs along its length through the project area. **Figure 3** depicts the location of Peacock Ravine Creek within the project area. Project activities will not directly impact the culvert or the channel.

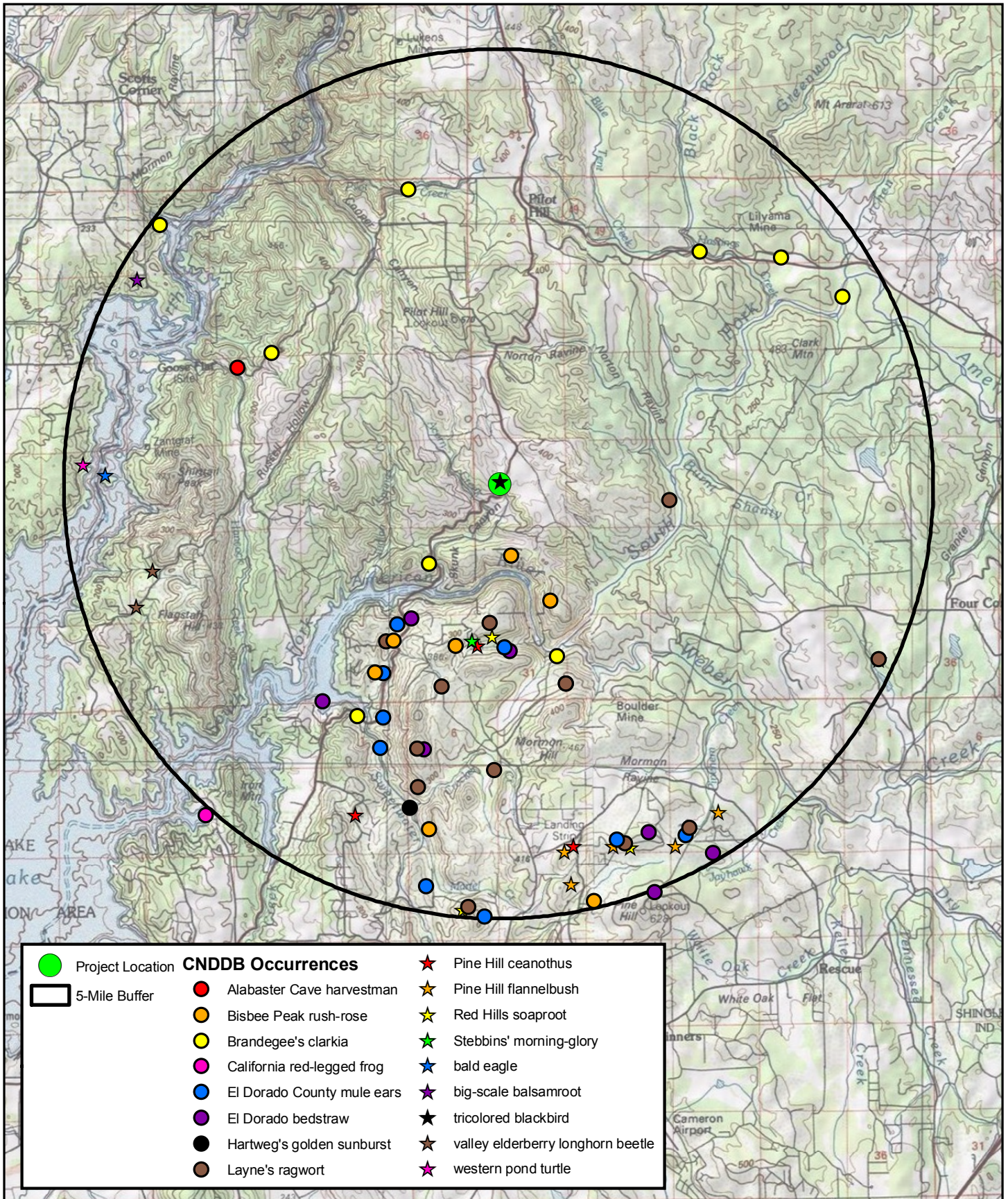
A query of the California Natural Diversity Database (CNDDDB) was conducted for the Clarksville, Coloma, Pilot Hill, and Shingle Springs USGS quadrangles. There were no biologically important areas in the project area. The CNDDDB query identified tricolored blackbird and Bisbee Peak rush-rose as the only special-status species with a recorded occurrence within one mile of the project site. There are fifteen additional special-status species identified by the CNDDDB as occurring within 5 miles of the project site (**Figure 4**). The U.S. Fish and Wildlife Service (USFWS) list identified thirteen listed species and four candidate species within El Dorado County. There is one occurrence of tricolored blackbird within the project study area. This occurrence was recorded in 1971 in which 400 birds were observed using a nesting substrate consisting of blackberries. The site was visited in 1992 to try to update the occurrence and nesting substrate was found, but no birds were observed nesting in 1992. No other special-status species occurrences have been recorded 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 CDFG in their lists as regional species and habitats of concern.



Data Source: El Dorado County 2011; Padre 2011; ESRI 2011.

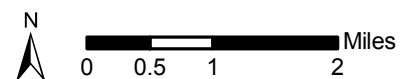
Figure 3: Vegetative Cover Type Map
Salmon Falls Road Realignment Project





Data Source: El Dorado County 2011; Padre 2011; ESRI 2011.

Figure 4: Special Status Species Occurrences
 Salmon Falls Road Realignment Project



**Table 4-4
Regional Species and Habitats of Concern**

Scientific Name	Common Name	Status ¹	Habitat	Habitat Present	
HABITATS					
Waters of the U.S.			Regulated by USACE and CDFG	Yes	
Riparian woodlands			Regulated by USACE and CDFG	Yes	
Oak woodlands			Protected by El Dorado County	Yes	
Scientific Name	Common Name	Status ¹	Habitat	Habitat Present	Rationale
PLANTS					
<i>Senecio layneae</i>	Layne's ragwort	FT, CE	Chaparral, woodland, rocky serpentine and gabbro soils	Possible	Rescue series soils present (gabbro)
<i>Calystegia stebbinsii</i>	Stebbin's morning-glory	FE, CE	Chaparral, woodland within rocky serpentine and gabbro soils	Possible	Rescue series soils present (gabbro)
<i>Ceanothus roderickii</i>	Pine Hill ceanothus	FE	Chaparral, woodland within rocky serpentine and gabbro soils	Possible	Rescue series soils present (gabbro)
<i>Fremontodendron californicum ssp. decumbens</i>	Pine Hill flannelbush	FE	Chaparral, woodland within rocky serpentine and gabbro soils	Possible	Rescue series soils present (gabbro)
<i>Galium californicum ssp. sierrae</i>	El Dorado bedstraw	FE	woodland within rocky serpentine and gabbro soils	Possible	Rescue series soils present (gabbro)
<i>Clarkia bilboea ssp. brandegeae</i>	Brandegee's clarkia	CNPS 1B	Chaparral, Cismontane woodlands, and roadcuts.	Possible	Steep roadcuts present in suitable habitats
<i>Chlorogalum grandiflorum</i>	Red Hills soaproot	CNPS 1B	Chaparral, woodland within rocky serpentine and gabbro soils	Possible	Rescue series soils present (gabbro)
<i>Helianthemum suffrutescens</i>	Bisbee Peak rush-rose	CNPS 3	Chaparral, often on serpentine, gabbro, or lone soils	Possible	Rescue series soils present (gabbro)
<i>Wyethia reticulata</i>	El Dorado County mule ears	CNPS 1B	Chaparral, cismontane woodland, lower montane coniferous forest on clay or gabbro soils	Possible	Rescue series soils present (gabbro)

**Table 4-4
Regional Species and Habitats of Concern**

Scientific Name	Common Name	Status ¹	Habitat	Habitat Present	Rationale
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	Big-scale balsamroot	CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland, sometimes serpentine soil	Possible	Rescue series soils present (gabbro), serpentine soil may be present
<i>Pseudobahia bahiifolia</i>	Hartweg's golden sunburst	FE, CE, CNPS 1B	Cismontane woodland, valley and foothill grassland, clay soils	No	Lack of clay soils
<i>Rorippa subumbellata</i>	Tahoe yellow-cress	FC, CE	Montane coniferous forest, meadows and seeps	No	Project site is below elevational range
INVERTEBRATES					
<i>Lepidurus packardi</i>	Vernal pool tadpole shrimp	FE	Vernal pools	No	Lack of suitable habitat
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	FT	Vernal pools	No	Lack of suitable habitat
<i>Desmocerus californicus dimorphus</i>	Valley elderberry longhorn beetle	FT	Elderberry shrubs	No	Lack of suitable habitat (no elderberry shrubs present)
FISHES					
<i>Oncorhynchus tshawytscha</i>	Winter-run chinook salmon	FE, CE	Sacramento River with clean, cold water, and gravel beds	No	Lack of suitable habitat
<i>Oncorhynchus tshawytscha</i>	Central Valley spring-run chinook salmon	FT	Sacramento River system	No	Lack of suitable habitat
<i>Oncorhynchus clarki henshawi</i>	Lahontan cutthroat trout	FT	High mountain streams and lakes	No	Lack of suitable habitat
<i>Oncorhynchus mykiss</i>	Central Valley steelhead	FT	Sac-San Joaquin rivers	No	Lack of suitable habitat
<i>Hypomesus transpacificus</i>	Delta smelt	FT, CT	Sac-San Joaquin Delta	No	Lack of suitable habitat
AMPHIBIANS					
<i>Rana draytonii</i>	California red-legged frog	FT	Ponds, pools, wetlands	Yes	Potential breeding or non-breeding habitat in Peacock Ravine Creek
<i>Ambystoma californiense</i>	California tiger salamander	FT	seasonal pools and stock ponds	No	Lack of suitable habitat

**Table 4-4
Regional Species and Habitats of Concern**

Scientific Name	Common Name	Status ¹	Habitat	Habitat Present	Rationale
<i>Bufo canorus</i>	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
<i>Rana muscosa</i>	Mountain yellow-legged frog	FC, CSC	Found in lakes, ponds, marshes, meadows, and streams.	No	Project site below elevational range
<i>Rana boylei</i>	Foothill yellow-legged frog	CSC	Streams and rivers to 2,088 m (6,000 ft)	Yes	Potential breeding or non-breeding habitat in Peacock Ravine Creek
REPTILES					
<i>Clemmys m. marmorata</i>	Northern Pacific pond turtle	CSC	Streams, marshes, ponds, usually north of San Francisco Bay	Possible	Habitat present but not optimal
<i>Thamnophis gigas</i>	Giant garter snake	FT, CT	Valley marshes and sloughs	No	Lack of suitable habitat
BIRDS					
<i>Agelaius tricolor</i>	Tricolored blackbird	CSC	Marshes and blackberry thickets	Yes	Habitat present in Peacock Ravine Creek; nesting colony recorded at site in 1971.
MAMMALS					
<i>Martes pennanti</i>	Fisher	FC	Mature to climax conifer forests	No	Lack of suitable habitat
¹ Status:					
FE = Federal Endangered		CE = California State Endangered			
FT = Federal Threatened		CT = California State 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. The project area is located within the USGS 7.5-minute Pilot Hill quadrangle², and according to the USFWS, several special status species have the potential to occur within the USGS 7.5-minute Pilot Hill quadrangle (USFWS, 2010). Because the list covers an area much larger than that of the project and includes habitats that are not present within its boundaries, it can be said with certainty that several of the noted species do not occur within the project area. Examples include fish and amphibian species that require habitats not available within or immediately adjacent to the project area or invertebrates that require specific host plants not present within the project area.

Based on a records search of the CNDDDB and the USFWS list for the Pilot Hill quadrangle and the surrounding quadrangles (conducted by Padre Associates biologists), 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. The studies indicate that the proposed project has the potential to impact the Pine Hill endemic species (Layne's ragwort (*Senecio layneae*), Stebbin's morning-glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), Pine Hill flannelbush (*Fremontodendron californicum ssp. decumbens*), El Dorado bedstraw (*Galium californicum ssp. sierrae*), Red Hills soaproot (*Chlorogalum grandiflorum*), Bisbee Peak rush-rose (*Helianthemum suffrutescens*), El Dorado County mule ears (*Wyethia reticulata*)) and two special-status plant species: Brandegee's clarkia (*Clarkia bilboea ssp. brandegeae*) and big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*). Rare plant surveys were conducted in June 2011 during the blooming period for the rare plant species. No rare plants were observed during rare plant surveys.

Two special-status amphibian species (California red-legged frog and Foothill yellow-legged frog) have a potential to occur within the study area. Implementation of Mitigation Measure 1 would reduce this potentially significant impact to a less-than-significant level.

Spring surveys were conducted in June 2011 to determine the presence/absence of blue elderberry shrubs (*Sambucus nigra* L. ssp. *caerulea*), obligate host plants to the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Blue elderberry shrubs are identifiable when they bloom in the spring, and no blue elderberry shrubs were observed in the project area during the June 2011 surveys.

² The U.S. Geological Survey (USGS) maintains topographical maps of the United States. Each map is 1:24,000-scale topographic map, which is also known as a 7.5-minute quadrangle map. The Pilot Hill quadrangle is located along El Dorado County's western border and includes the community of Pilot Hill. For more information, please see: <http://topomaps.usgs.gov/>

Although no tricolored blackbirds (TCBBs) were observed during biological surveys, Himalaya blackberry is present within Peacock Ravine Creek, which are known to provide breeding habitat for TCBBs. Implementation of Mitigation Measure 2 would reduce this potentially significant impact to a less-than-significant level.

The trees, shrubs, and grasslands on the site provide suitable habitat for a number of common and special-status avian species protected by the Migratory Bird Treaty Act (MBTA). The MBTA prohibits the killing of migratory birds. Because the proposed project requires the removal of trees, the potential for project impacts to avian species is considered significant. Implementation of Mitigation Measure 3 would reduce this potentially significant impact to a less-than-significant level.

Mitigation Measure 1. The County shall implement the following measures to minimize impacts on Foothill yellow-legged frogs (FYLF) and California red-legged frogs (CRLF):

- Wetted channel segments, areas of riparian scrub, and other Environmentally Sensitive Areas within the project study 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 FYLF/CRLF survey of the project site 48 hours before the onset of work activities. If any FYLF/CRLF are 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 FYLF/CRLFs the shortest distance possible to a location that contains suitable habitat that 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 channels 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.
- 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 dry 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 BMPs 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.
 - The monitoring biologist shall permanently remove any individuals of exotic species, such as bullfrogs, 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.

Mitigation Measure 2. If construction activities are initiated after March 1, pre-construction bird surveys shall be performed to determine the location of nest sites within the project area. A 100-foot buffer zone shall be established around active TCBB nests within the project area unless CDFG permits a reduced buffer zone based on nesting phenology and recommendation(s) of a biological monitor.

Construction activities shall be confined to the project area to minimize the effects on wildlife occurring adjacent to the project area. Construction equipment shall be required to have functional mufflers and properly tuned and maintained in a manner to reduce noise levels.

Mitigation Measure 3. The following measures shall be implemented to reduce project impacts on bird species:

- Minimize removal of native vegetation by locating staging areas and access routes in previously disturbed areas;
- Removal of vegetation shall be conducted in the fall and winter (between September 15 and March 1) after fledging and before the initiation of breeding activities;
- If construction activities are initiated after March 1, pre-construction bird surveys shall be performed to determine the location of nest sites within the project area. A 100-foot buffer zone shall be established between active passerine nests within the project area, and a 500-foot buffer zone between active raptor nests within or adjacent to the project area, unless CDFG permits a reduced buffer zone based on nesting phenology and recommendation(s) of a biological monitor;
- Construction activities shall be confined to the project area to minimize the effects on wildlife occurring adjacent to the project area. Construction equipment shall

be required to have functional mufflers and properly tuned and maintained in a manner to reduce noise levels.

- 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. The project would not have an adverse effect on riparian habitat or any sensitive natural communities as identified by the CDFG or USFWS. Riparian habitat is located in the channel that flows through the culvert in the project area; however, no construction activities are proposed in the channel.

Development of the proposed project would result in the loss of oak woodland habitat, which is a natural community identified in the El Dorado County General Plan. Based on the cover type mapping, a loss of 0.63 acre of oak woodlands is anticipated. Development of the proposed project would require the removal of up to 45 oak trees. The oak trees proposed for removal vary from 4 inches in diameter to 49 inches (multi-trunk) in diameter.

Several El Dorado County General Plan policies promote the protection of native oak trees in the County. In addition, the County's adopted Oak Woodland Management Plan (OWMP) implements the General Plan oak woodland protection policies.

As stated in the OWMP:

“Public Road and Public Utility Projects Exempt from Policy 7.4.4.4 – Oak canopy removal necessary to complete County capital improvement projects are exempt from the canopy retention and replacement standards, when the new alignment is dependent on the existing alignment. This exemption applies to road widening and realignments which are necessary to increase capacity, to protect the public’s health, and to improve the safe movement of people and goods in existing public road rights-of-way, as well as acquired rights-of-way necessary to complete the project. This exemption shall also apply to removal of oak canopy necessary to comply with the safety regulations of the Public Utilities Commission and necessary to maintain a safe operation of utility facilities. The County shall minimize, where feasible, the impacts to oaks through the design process and right-of-way acquisition for such projects.”

The proposed project is included as Project Number 73362 on the County Capital Improvement Program. The project is dependent upon the existing alignment along Salmon Falls Road and is necessary to protect the public’s health and improve operational safety through the proposed corridor. In accordance with Policy 7.4.4.4, the proposed project is exempt from the canopy retention and replacement standards.

- 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. Riparian habitat is located in the channel that flows through the culvert in the project area; however, no construction activities are proposed in the channel. The proposed project would not impact the channel; therefore, this impact is considered 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. Peacock Ravine Creek, which flows from a northerly direction through an existing box culvert under Salmon Falls Road south away from the project site, supports a riparian corridor of trees and shrubs along its length through the project area. Peacock Ravine Creek also provides a corridor within the area for seasonal migrations to higher and lower elevational areas in the region. However, there are no known wildlife corridors or native wildlife nursery sites within the project area. The roadway development associated with the project is not expected to affect the regular movement of wildlife through or adjacent to the project area.

- 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. The proposed project site contains native oak trees that are protected under the El Dorado County General Plan and CEQA. It is anticipated that up to 45 oak trees would require removal in order to develop the proposed project. The County's Oak Woodland Management Plan (OWMP) implements the General Plan oak woodland protection policies. As stated in the OWMP:

“Public Road and Public Utility Projects Exempt from Policy 7.4.4.4 – Oak canopy removal necessary to complete County capital improvement projects are exempt from the canopy retention and replacement standards when the new alignment is dependent on the existing alignment. This exemption applies to road widening and realignments that are necessary to increase capacity, to protect the public's health, and to improve the safe movement of people and goods in existing public road rights-of-way, as well as acquired rights-of-way necessary to complete the project.”

In accordance with Policy 7.4.4.4, the proposed project is exempt from the canopy retention and replacement standards.

- 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?*

Less Than Significant. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans which are applicable to the project area. The project would not affect implementation of the USFWS's adopted recovery plans for California Red-legged Frog or gabbro soils plants, both of which apply to portions of El Dorado County. Though the proposed project is located within the Sierra Nevada Foothills and Central Valley Recovery Unit identified in the USFWS Recovery Plan for the California Red-legged Frog, the project area lacks water features that could potentially provide suitable habitat; however, Peacock Ravine Creek and its tributary are in close proximity to the project area. The proposed project would be developed in accordance with the requirements of the USFWS; therefore, the proposed project would not conflict with the provisions of the California Red-legged Frog Recovery Plan. 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.

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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

In January 2011, Schwitalla Consulting conducted a pedestrian archaeological survey of the area of potential effects (APE). A record search was conducted through the North Central California Information Center of the California Historical Resources Information System on December 10, 2010 for the project area and a ½-mile radius around the project area. In addition, records and maps of previously recorded prehistoric and historic sites were reviewed, as well as maps of previous cultural resources surveys in the region. In the APE, there are no previously recorded archaeological resources.

A letter was sent to the Native American Heritage Commission (NAHC) requesting a check of the Sacred Lands files. Schwitalla Consulting sent consultation letters to the Native American contacts provided by the NAHC.

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 January 2011 archaeological evaluations of the project area, no known historic resources are located within the proposed project area. However, there is always the potential to disturb unknown historic resources during construction activities. Implementation of **Mitigation Measure 4** would ensure that the proposed project would result in a less than significant impact to historic resources.

Mitigation Measure 4. Any and all potential archaeological resources discovered during construction shall be examined by a qualified archaeologist, who shall examine the findings, assess their significance, and offer recommendations for appropriate handling procedures. Work within 100 feet of the find shall cease.

In the event that unanticipated historical or archeological resources (including structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains) are encountered during construction, all earthmoving activity shall cease until the developer retains the services of a qualified archaeologist. The archaeologist or paleontologist shall examine the findings, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts to those cultural or paleontological archaeological resources that have been encountered (e.g., excavate the significant resource). If human remains are discovered, the County is subject to the provisions of the California Health and Safety Code Section 7050.5 and California PRC Section 5097.94 et seq., regarding the discovery and disturbance of human remains should any be discovered during project construction.

- 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 January 2011 archaeological evaluations of the project area, no known archaeological resources are located within the proposed project area. There is always the potential to disturb unknown archaeological resources during construction activities; therefore, implementation of **Mitigation Measure 4** would ensure that the proposed project would result in a less than significant impact to prehistoric and historic resources.

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

No Impact. According to the El Dorado County General Plan Environmental Impact Report (Pages 2-69 and 2-70 of Volume 4a), paleontological resources in El Dorado County are associated with limestone cave deposits, occurrences of the Mehrten formation, and Pleistocene channel deposits. Since the project does not occur in areas supporting any of these formations, construction is not expected to affect any paleontological resources. The site also does not contain any other unique geologic features.

- 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; There is always the potential to disturb unknown human remains during construction activities; therefore, implementation of **Mitigation Measure 4** would ensure that the

proposed project would result in a less than significant impact to potential human remain disturbance.

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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

The USDA Soil Conservation Service “Soil Survey of El Dorado Area, California” (1974) depicts the site as covered by Auburn Series soils (Auburn silt loam, 2 to 30 percent slopes [AwD]) and Rescue Series soils (Rescue very stony sandy loam, 30 to 50 percent slopes [RfE]). Both soil types are well drained.

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 rock outcropping to the west of the project roadway would be blasted and stabilized to reduce the potential for slope runoff, erosion and sloughing of material. Measures would be implemented during blasting procedures to ensure that slope runoff and erosion would not 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 1.33 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. Soils in the project area include Auburn silt loam, 2 to 30 percent slopes (AwD) and Rescue very stony sandy loam, 30 to 50 percent slopes (RfE). The Auburn soils have a low shrink-swell potential, while Rescue soils have moderate to high shrink-swell potential. Soil types within the project area are not susceptible to landsliding, lateral spreading, subsidence, liquefaction, or collapse. The project is not located on a geologic unit known to be unstable and/or susceptible to landsliding, lateral spreading, subsidence, liquefaction, or collapse.

- 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. Roadway improvements at the project site would include the modification of the soil immediately below any roadway improvements. As discussed above, the Auburn series soils have a low shrink-swell potential, while Rescue soils have a moderate to high shrink-swell potential. Construction of the proposed improvements would include the addition of an aggregate base below the road surface that would reduce 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?*

Less Than Significant. Neither septic tanks nor alternative wastewater disposal systems are part of the proposed project. This impact is considered less than significant.

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4.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓

4.7.1 Environmental Setting

Assembly Bill 32, adopted in 2006, established the Global Warming Solutions Act of 2006 which requires the State to reduce greenhouse gases (GHGs) to 1990 levels by 2020. Senate Bill 97, adopted in 2007, requires the Governor’s Office of Planning and Research (OPR) to develop draft CEQA guidelines “for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions.” On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for addressing greenhouse gas emissions, as required by Senate Bill 97. The amendments became effective on March 18, 2010.

The EDCAQMD considers climate change, also known as global warming, to be a serious matter. Documented impacts of climate change include rising sea levels, glacier retreat, shortening of frost seasons, and increases in precipitation, among other events. It is a virtual consensus in the scientific community that climate change is being heavily influenced by the rising concentration of GHGs, primarily atmospheric carbon dioxide (CO₂). Burning of fossil fuels, including oil, natural gas, gasoline and coal, is a major contributor to rising GHG levels (AQMD July 14, 2008).

On March 25, 2008, the El Dorado County Board of Supervisors adopted the “Environmental Vision for El Dorado County” Resolution No. 29-2008. The Resolution sets forth goals and calls for implementation of positive environmental changes to reduce global impact, improve air quality and reduce dependence on landfills, promote alternative energies, increase recycling, and encourage local governments to adopt green and sustainable practices. The Resolution includes the following goals pertaining to Transportation, Traffic and Transit and Planning and Construction:

Transportation, Traffic and Transit

- Reduce carbon emissions and greenhouse gases
- Promote carpooling and reduce vehicle miles traveled
- Promote pedestrian and bicycling commuting
- Expand transit opportunities
- Utilize clean-fueled vehicles for county employees
- Promote programs and designs that reduce traffic congestion

Planning and Construction

- Promote the use of clean, recycled, and “green” materials and building practices
- Distribute available environmental education information in construction permit packages including energy and water efficiency in new construction
- Promote the design of sustainable communities
- Encourage pedestrian/cycling-incentive planning
- Involve the Public Health Department in community planning to provide comment on community health
- Encourage energy-efficient development
- Updates to the Zoning Ordinance should include provisions to allow and encourage use of solar, wind and other renewable energy resources

4.7.2 Potential Environmental Effects

- a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant. GHG emissions associated with the project would result from the transport and operation of construction-related equipment. As discussed in Section 4.3 of this MND, construction emissions were estimated for the project using the Sacramento Air Quality Management District’s *Road Construction Emissions Model, Version 6.3.2* as recommended in the *EDCAQMD Guide to Air Quality Assessment*. As shown in **Table 4-5**, the Road Construction Emissions Model estimated the pounds of CO₂ per day during each of the construction phases of the project.

Project Phases	CO₂ (lbs/day)
Grubbing/Land Clearing	3,235.5
Grading/Excavation	11,084.5
Drainage/Utilities/Sub-Grade	3,006.3
Paving	1,226.4
Maximum (pounds/day)	11,084.5
Significance Criteria	None Established
Significant	No
Notes:	
Data entered to emissions model: Project Start Year: 2013; Project Length (months): 3; Total Project Area (acres): 4.7; Total Soil Imported/Exported (yd ³ /day): 500. Miles per round trip for soil hauling activities: 30 miles; Number of round trips per day: 25.	
PM ₁₀ estimates assume 50% control of fugitive dust from watering and associated dust control measures.	
Source: Emissions estimated using Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 6.3.2	

El Dorado County has not established a quantified significance criterion for GHG emissions; however, GHG emissions resulting from construction activity would be short-term in nature and limited in scope. Thus, while the project would have an incremental contribution within the context of the County and region, the individual impact is considered less than significant.

Additionally, because the project is not traffic-inducing or growth-inducing and would not change the way in which the roadway is used, the proposed project would not result in the generation of additional vehicle trips after construction is complete. This impact is considered less than significant.

- b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

No Impact. The project would not generate significant emissions of greenhouse gases and, therefore, would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing the emission of greenhouse gases.

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4.8 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?				✓

4.8.1 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 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.

4.8.2 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, roadway resurfacing 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 with Mitigation Incorporation. The El Dorado County Environmental Management Department sampled and tested soils at five locations along the unpaved shoulders of Salmon Falls Road where construction activity would likely disturb surface soils. The samples were tested for aerially deposited lead. Additionally, a paint chip sample was collected from the yellow center stripe within the project area.

Laboratory results for the total lead sample range from 23 milligrams per kilogram (mg/kg) to none detected. None of the results for total lead analyses exceeded regulatory threshold levels (40 CCR, Section 261).

The paint sample contained lead and hexavalent chromium concentrations that are considered a hazardous waste under state of California Hazardous Waste classification. Because laboratory analytical results indicate that centerline paint striping contains hazardous levels of lead and chrome, implementation of **Mitigation Measure 5** would reduce this impact to a less-than-significant level.

Mitigation Measure 5. Removal of the centerline paint striping within the project area shall be performed by a licensed hazardous waste contractor. The centerline paint striping shall be disposed of in accordance with applicable rules and regulations.

- 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?*

No Impact. Lake Forest Elementary School is located approximately 6.0 miles southwest of the project area. As noted above, the project would involve the handling of hazardous materials; however, handling and storage of hazardous materials would comply with all applicable local, state, and federal standards. Furthermore, because the type and level of use is not expected to change, the project is also not expected to result in long-term vehicle-related emissions that may be hazardous (see the air quality discussion regarding vehicular emissions).

- 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 EnviroStor Database.

- 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 public airport is the Cameron Park Airport, which is located approximately 7.6 miles south of the proposed 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. The nearest private airstrip is the Akin Airport, which is located approximately 7.0 miles southeast of the project area.

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

Less Than Significant. The proposed project involves the realignment of Salmon Falls Road and would require temporary lane closures during blasting and other construction activities and traffic lane diversions to enable construction activities to proceed safely. During blasting activities, a full road closure within the project vicinity (for up to four hours daily) would be required. A full road closure has the potential to compromise emergency response times; however, project construction activities would be coordinated with local law enforcement and emergency services providers to ensure minimal impact to emergency response times and road closures would not exceed 20 minutes as discussed in Section 3.4.6.1 of this MND. The County would notify local law enforcement and emergency response providers of the date(s) and time(s) of blasting activities. 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.

The County anticipates that other construction activities (e.g., grading, paving, striping) would require the construction contractor to close traffic in one direction while construction activities were occurring. Diversions of traffic would be signed; and barriers, striping, and cones would be used as necessary to guide traffic and delineate temporary lanes. Flagpersons would monitor and guide traffic during periods of equipment movement or when construction activities were occurring near traffic lanes to ensure public and worker safety. 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. The proposed project construction would not affect the provision of emergency services in and adjacent to the project area or evacuation in the event of a major emergency. 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 project is in an area dominated by fuels classified as “very high” in terms of wildland fire risk (<http://wildfire.cr.usgs.gov/fireplanning>), accessed December 14, 2010). However, because the project involves placement of impervious surface and would not introduce a fuel source, 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.

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4.9 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?				✓

4.9.1 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).

One intermittent channel (Peacock Ravine Creek) occurs within the project study area. The channel flows in a northerly to southerly direction through a box culvert at the northern limits of the project area. The channel width varies from approximately 6 feet at the culvert to approximately 12 to 15 feet upstream of the culvert and is not visible downstream of the culvert due to extensive vegetative cover. The channel supports a riparian corridor of trees and shrubs along its length through the project study area.

According to the Federal Emergency Management Agency (FEMA) Map, (Community Panel Number: 06017C0450E, Effective Date September 26, 2008) the project area is located in an area determined to be outside of the 0.2 percent annual chance floodplain (Zone X).

4.9.2 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. The proposed project would result in the addition of approximately 0.071 acres (3,067 square feet) of impervious surface in the form of realigned and widened roadway surface. The stormwater runoff associated with the increase in impervious surface within the project area would be accommodated by the existing drainage system and addition of a new drainage system. 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 proposed roadway would be widened on the inside of the existing curve (west side of the existing road). Water flowing to the east side would be captured in a rock-lined roadside ditch (approximately 210 feet in length). Water flowing to the west side would be retained in a rock-lined roadside ditch (approximately 450 feet in length). The roadside ditches would be approximately 4 feet wide and one-foot deep. An existing culvert is located at the Salmon Falls Road/Glenesk Lane intersection; however, the culvert would not be modified. The project would result in the addition of 0.071 acres (3,067 square feet) of impervious surface in the form of realigned roadway surface. The increase in impervious surface within the project area would not substantially alter the drainage pattern within the project area. Therefore, the proposed project would not result in substantial increases in runoff to the extent that the existing drainage system 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 0.071 acres (3,067 square feet) of impervious surface. 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 roadway improvement 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. The project is not located within or adjacent to any dams, levees, or mapped 100-year floodplains. The nearest 100-year floodplain is located approximately 2.0 miles south of the project area. 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.

4.10 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?				✓

4.10.1 Environmental Setting

The primary applicable land use plan within the project area is the 2004 El Dorado County General Plan. The El Dorado County General Plan policies are applicable to the proposed project area.

4.10.2 Potential Environmental Effects

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

No Impact. The project involves realignment and widening of approximately 600 feet of Salmon Falls Road. The areas surrounding the project area are predominated by wooded grasslands and pastures with occasional homes on five-acre parcels or larger. The existing and proposed roadway alignments would not divide an established community.

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 and 4.15(b) below). Project design and implementation of the project-specific mitigation measures identified within this

MND would ensure the proposed project would not conflict with 2004 General Plan goals, policies and/or objectives. This impact is considered less than significant.

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

No Impact. As noted above under the response to 4.4(f), there are no adopted Habitat Conservation Plans or Natural Community Conservation Plans that apply to the project area. The project would not affect implementation of the USFWS' adopted recovery plans for California Red-legged Frog or gabbro soils plants, both of which apply to portions of El Dorado County. The proposed project is located within the Sierra Nevada Foothills and Central Valley Recovery Unit identified in the USFWS Recovery Plan for the California Red-legged Frog. Although Peacock Ravine traverses the project area, the culvert crossing at Peacock Ravine would not be modified by the proposed project. The proposed project would be developed in accordance with the requirements of the USFWS; therefore, the proposed project would not conflict with the provisions of the California Red-legged Frog Recovery Plan. 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; however, the project area is located immediately adjacent to the north portion of the Pine Hill formation. Rare plant surveys were conducted in June 2011 during the blooming period for this species. No rare plants were observed during rare plant surveys.

4.11 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?				✓

4.11.1 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.

4.11.2 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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4.12 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?				✓

4.12.1 Environmental Setting

Of the existing noise sources in the area, the most prominent is vehicular traffic along Salmon Falls Road. The El Dorado County Draft EIR (2003) identifies that future conditions along Salmon Falls Road may expose noise-sensitive land uses adjacent to the roadway to noise levels that exceed the applicable standards. Baseline conditions calculated in 2001 (provided in the El Dorado County Draft EIR [2003]) indicate that noise levels are approximately 62.97 dBA 50 feet from the existing roadway centerline within the project area. These existing conditions exceed the applicable standards for noise levels for residential uses.

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. Table 6-5 of the General Plan indicates that the maximum allowable noise exposure for construction noise in rural regions (specifically lands designated as Rural Residential) is 65 dB L_{eq} and 75 dB L_{max} between 7 a.m. and 7 p.m.

The significance of potential noise impacts associated with operation of transportation facilities is normally measured using General Plan Policy 6.5.1.12, which takes into account the existing (ambient) noise environment. However, because the project would not result in an increase of the number of vehicles passing through the roadway corridor, the ambient condition is not expected to change as a result of the project.

4.12.1.1 Blasting Activities

The proposed project would require blasting activities to accommodate the proposed roadway realignment. Noise from blasting activities would be sporadic but would likely travel long distances to potential receptors. Some blasting may occur as a means of excavating the embankment on the west side of Salmon Falls Road. Generally blasting includes boring holes into the rock and burying multiple charges. The charges are detonated in a series or sequence. In other words they do not detonate simultaneously. Noise levels associated with blasting are generally very low frequency to which the human ear is not acute. Maximum noise levels associated with blasting are expected to be well below 70 dBA L_{max} at the nearest residences. As discussed above, Table 6-5 of the General Plan indicates that the maximum allowable noise exposure for construction noise in rural regions (specifically lands designated as Rural Residential) is 75 dB L_{max} between 7 a.m. and 7 p.m.

4.12.1.2 Groundborne Vibration

The majority of the studies conducted on human tolerance to vibrations have been of steady-state sources, meaning that the amplitude and frequency of the vibration remain constant over the test period. This type of testing is usually performed with vibrations lasting much longer than the vibrations from a typical construction blast event.

A study conducted by the U.S. Bureau of Mines indicates that the threshold at which the population considers ground vibration “very annoying” is 0.60 in/sec. This datum is based on human response to not only perceived vibration in their homes, but also the house rattle and other noise produced by vibration in a residential structure.

Table 4-6 indicates that the threshold for damage to structures ranges from 2 to 6 inches/second (in/sec). One-half this minimum threshold or 1 in/sec peak particle velocity (p.p.v.) is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Peak Particle Velocity (inches/second)	Peak Particle Velocity (mm/second)	Human Reaction	Effects on Buildings
0.-0.006	0.15	Imperceptible by people	Vibrations unlikely to cause damage of any type
0.006-0.02	0.5	Range of Threshold of perception	Vibrations unlikely to cause damage of any type
0.08	2.0	Vibrations clearly perceptible	Recommended upper level of which ruins and ancient monuments should be subjected
0.1	2.54	Level at which continuous vibrations begin to annoy people	Virtually no risk of architectural damage to normal buildings
0.2	5.0	Vibrations annoying to people and buildings	Threshold at which there is a risk of architectural damage to normal dwellings
1.0	25.4		Architectural damage
2.0	50.4		Structural damage to residential buildings
6.0	151.0		Structural damage to commercial buildings

Source: j.c. brennan & associates, Inc., 2011

4.12.2 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. As discussed in Section 3.4.6.1 of this MND, the proposed project includes blasting activities during construction to accommodate the roadway realignment. However, these increases would be temporary. Daytime construction activity would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11, and any nighttime work would be allowed if nighttime construction activities would alleviate traffic congestion and safety hazards.

Table 6-5 of the General Plan indicates that the maximum allowable noise exposure for construction noise in rural regions (specifically lands designated as Rural Residential) is 75 dB L_{max} between 7 a.m. and 7 p.m. The predicted construction noise levels would be less than 70 dBA L_{max} , expected to be in the range of 50 dBA L_{eq} at the nearest residences, without accounting for shielding (j.c. brennan & associates, 2011).

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. The proposed project would not generate increased traffic through the project area and would result in a realignment of the roadway approximately 17 feet west of the current alignment. j.c. brennan & associates, Inc. (JCB) estimated the change in project noise levels based on the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model. JCB’s modeling indicated that the proposed project would result in a 0.5 dB increase in the average noise level at the residence to the west of the proposed project area. The estimated increase in noise levels is within 1.5 dB threshold increase established by General Plan Policy 6.5.1.12. The 17-foot realignment of the roadway and the absence of increased traffic generation 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. Because the project would not expand the roadway or change the way in which it is used, an increase in groundborne vibration associated with use of the road would not change from the current condition.

El Dorado County does not have criteria for vibration impacts. The types of construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. **Table 4-7** shows the typical vibration levels produced by construction equipment.

Table 4-7. Vibration Levels for Varying Construction Equipment		
Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Approximate Velocity Level at 25 feet (VdB)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58
Auger/drill rigs	0.089	87
Jackhammer	0.035	79
Vibratory Hammer	0.070	85
Vibratory Compactor/roller	0.210	94
Source: j.c. brennan & associates, Inc., 2011		

Based upon the construction vibration levels shown in **Table 4-7**, it is not expected that construction activities would exceed the criteria shown in **Table 4-6**, and will

not result in annoyance or damage to buildings or structures.

Blasting may occur as a means of excavating rock formations adjacent to the project site. JCB conducted ground vibration monitoring of blasting activities for mining operations at the Spreckles aggregate operation in Placer County. Vibration levels were measured to be no more than 0.1 inches per second, peak particle velocity at distances of 100 feet to 200 feet from the blasts. Therefore, based upon **Table 4-7**, it is not expected that blasting would result in vibration levels which would cause structural damage to residential buildings or water wells in the general vicinity.

Blasting activities would be temporary and periodic, and therefore, would result in a less-than-significant impact; however, implementation of **Mitigation Measure 6** would ensure that this impact remains less than significant.

Mitigation Measure 6. The County and/or its construction contractors shall notify property owners within 1,200 feet of the project area of potential road closures and the estimated schedule for blasting activities. Notifications shall be issued by the County and/or its construction contractors within one week in advance. Controlled blasting shall conform to all Federal, State, and local regulations.

- 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 is not traffic-inducing or growth-inducing and would not change the way in which the roadway is used, 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. As discussed above, the proposed project would require blasting activities associated with the removal of the rock outcropping west of the existing roadway. Blasting activities would result in a substantial temporary increase in ambient noise levels. However, construction-related noise increases would be temporary. Typical daytime construction activity (excluding blasting) would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11, and any nighttime work would be allowed if nighttime construction activities would alleviate traffic congestion and safety hazards.

Table 6-5 of the General Plan indicates that the maximum allowable noise exposure for construction noise in rural regions (specifically lands designated as Rural Residential) is 75 dB L_{max} between 7 a.m. and 7 p.m. The predicted construction

noise levels would be less than 70 dBA L_{max} , expected to be in the range of 50 dBA L_{eq} at the nearest residences, without accounting for shielding (j.c. brennan & associates, 2011).

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?*

No Impact. The project area is not located within an airport land use plan area nor is it located within two miles of a public airport. 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.

4.13 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?				✓

4.13.1 Environmental Setting

The project area consists of lands predominated by wooded grasslands and pastures with occasional homes on adjacent parcels. The lands surrounding the project area are zoned for estate residential ten-acre (RE-10). The nearest residence to the project area is located approximately 530 feet east of the project area.

4.13.2 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)?*

Less Than Significant. The 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.

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4.14 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?				✓

4.14.1 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 (Station 73) is located approximately 2.75 miles north of the project area.

4.14.2 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.

4.15 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?				✓

4.15.1 Environmental Setting

There are no recreation facilities within or adjacent to the proposed project area. The nearest park is Henningsen Lotus Park, located approximately 6.0 miles east of the project area. A drop-in location along the South Fork of the American River located approximately 1.5 miles southwest of the project area.

4.15.2 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?*

No Impact. The project would not increase the use of existing parks in the area and does not include the construction of any recreational facilities.

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?*

No Impact. The project does not include the construction of any recreational facilities and would not require the expansion of existing recreational facilities.

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4.16 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)?				✓

4.16.1 Environmental Setting

The circulation systems for El Dorado County consist of a roadway network that until recently was primarily rural in character, but is rapidly urbanizing in the western portion of the County. U.S. 50 is the primary east-west transportation corridor connecting the County’s major population centers. Other State highways, County arterials, and a network of local public and private roads constitute the remainder of the roadway system. Salmon Falls Road is considered a rural minor arterial.

Currently, there are no transit facilities (e.g., bus turnouts) or bicycle facilities within the project area.

4.16.2 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 realignment of the project roadway but not a traffic-inducing or growth-inducing expansion of the existing roadway, the project would not result in an increase in traffic. Because no trip-generating land uses are associated with the project, the project would not result in substantial increases in traffic in or near the project area.

- 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. Because the project involves realignment of the project roadway but not a traffic-inducing or growth-inducing expansion of the existing roadway, it is not expected to exceed a level of service standard established by the County. Because no trip-generating land uses are associated with the project, the project would not result in substantial increases in traffic in or near the project area.

- 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)?*

No Impact (Beneficial). The project includes features intended to improve safety of the existing roadway. The project would not include design features such as sharp curves, dangerous intersections, or turning radii that would increase hazards. Because uses of the roadway and surrounding areas would not change, it would likewise not result in any use incompatibility. Because the project would realign the project roadway to reduce the risk of roadway hazards, this impact is considered beneficial.

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

Less Than Significant. The project contractor would be required to prepare a Traffic Management Plan for construction activities to ensure adequate access for emergency vehicles during project construction. The Traffic Management Plan would include

but would not be limited to a plan for extended daytime delays (road closures) for blasting activities, delays for lane closures, and construction equipment ingress/egress throughout the project area. Interagency communication during the construction phase would collectively determine the best alternative access routes necessary in order to minimize the impacts construction would have on response times. Following construction, the project would result in improved safety and operation on Salmon Falls Road which would be anticipated to result in a long-term improvement to emergency vehicle movement within the project area.

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

No Impact. Parking along Salmon Falls Road within the project area is prohibited; therefore, the proposed project would not impact on-street parking capacity.

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

No Impact. There are no transit facilities (e.g., bus turnouts) or bicycle facilities within the project area. The 2010 El Dorado County Bicycle Transportation Plan does not identify proposed bicycle facility improvements within the project area; however, the plan does recognize that development of bicycle facilities on rural roadways, such as the project area, may occur in the future.

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4.17 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?			✓	

4.17.1 Environmental Setting

Utilities located within and adjacent to the project area include electricity provided by Pacific Gas and Electric (PG&E) and telephone services provided by AT&T. Solid waste services in the project area are provided by El Dorado Disposal Service, Inc. Storm drainage facilities are maintained by El Dorado County.

4.17.2 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. 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 0.071 acre (3,067 square feet) of impervious surface in the form of realigned roadway surface. The stormwater runoff associated with the increase in impervious surface within the project area would be accommodated by existing and new drainage systems. 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 generated by the excavation of existing roadway and 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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4.18 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 is not expected to degrade the quality of the environment with the implementation of the mitigation measures identified in this MND. 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).

- 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 realignment of Salmon Falls Road within the project area. The proposed project would not significantly alter the existing visual character of the project area, would not result in the removal or obstruction of an identified scenic resource, and is not visible from a State scenic highway. Although the proposed project is located within a scenic viewpoint (pursuant to the El Dorado County General Plan), the proposed project would result in a temporary alteration of the scenic vista during the construction phase and would result in a relatively minor permanent physical change to the visual characteristics of the immediate project area by widening and realigning the roadway. The proposed project involves the blasting of the rock outcropping west of the project area. The proposed façade would be revegetated and would resemble the existing surroundings. The proposed project involves the removal of trees in the project area; however, because oak canopy removal is necessary to complete the proposed project (a County capital improvement project), the project is exempt from canopy retention and replacement standards. 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. Though the lands adjacent to the project area are designated "Agricultural Lands with an Important Biological Corridor Overlay" in the 2004 El Dorado County General Plan, 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 PM₁₀, NO_x, and ROG. However, with the implementation of EDCAQMD fugitive dust rules

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 PM₁₀ 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. The potential for special-status species to occur within the project area is low; therefore, this potential cumulative impact is less than significant. Implementation of Mitigation Measures 1 through 3 would ensure less than significant impacts to CRLF/FYLF/NPPT, tricolored blackbirds, birds protected by the MBTA, respectively. Since the project level impacts associated with biological resources would be reduced to less than significant, potential cumulative impacts to biological resources would be reduced to less than significant as well.

Cultural Resources

No cultural resources have been identified within the project site. Implementation of the proposed project would not 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. The project level impacts to cultural resources associated with the proposed project would be mitigated to a less-than-significant level. 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.

Greenhouse Gas Emissions

During the construction phase of the project, there is the potential to contribute to the generation of GHG emissions. Construction emissions were estimated for the project using the Sacramento Metropolitan Air Quality Management District's *Road Construction Emissions Model, Version 6.3.2*. Total CO₂ emissions for construction of the project are estimated at 302 metric tons.

Implementation of EDCAQMD Rules and best management practices would reduce the project's GHG contribution for construction emissions. Project operational CO₂ emissions associated with the project are not new emissions because the project would accommodate existing trips. As a result, the project represents a continuation of the same rate of CO₂ emissions as under current operating conditions. Therefore, the proposed project would not result in a net increase in GHG emissions from project operations.

Because the project would implement best management practices during project construction and because of the relatively short construction phase, the proposed project would result in a less-than-significant cumulative GHG emission impact associated with construction-related activities.

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. 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 would provide safety improvements to Salmon Falls Road within the project area. 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. The proposed project would require blasting activities that would be conducted according to a controlled blasting plan. Blasting activities would be conducted with appropriate blast hole patterns, detonation systems, and stemming to prevent venting of blasts and to limit air noise levels produced by controlled blasting operations. 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 the realignment of Salmon Falls Road within the project area. 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.

Transportation/Traffic

As described in Section 4.16 of the Initial Study, the proposed project would result in the realignment of Salmon Falls Road within the project area. The project is intended to improve the safety operations of the roadway segment within the project area. The project is therefore expected to have a beneficial impact on cumulative traffic operations in the project area.

Utilities and Service Systems

Construction activities related to the proposed project may result in temporary impacts to utilities and service systems, including electric and telephone 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 any underground utilities in the project area are coordinated with the roadway improvements. Additionally, adherence to the California Streets and Highways Code and the Public Utility Code would ensure that potential impacts are not cumulatively considerable.

- 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 is intended to provide safety improvements to the roadway segment within the project area and would result in beneficial effects. 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.

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5 Supporting Information Sources

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: December 14, 2010.

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

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

El Dorado County Bicycle Transportation Plan (January 2005)

El Dorado County Department of Transportation. 2009. Grant Application to Realign Roadway on Salmon Falls Road at Glenesk Lane. October 6, 2009.

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)

El Dorado County Environmental Management Department. 2011. Sampling and Analysis of Aerial Deposited Lead, Salmon Falls Road at Glenesk Lane Realignment Project, Milepost 7.79 to 7.89, El Dorado County. June 13, 2011.

j.c. brennan & associates, Inc. 2011. Noise & Vibration Assessment, Salmon Falls Road Realignment, El Dorado County, California. February 17, 2011.

Padre Associates, Inc. 2011. Natural Environment Study, HSIP Salmon Falls Road at Glenesk Lane Project, 03-ELD-El Dorado County-DEPARTMENT OF TRANSPORTATION [Project No. HSIPL-5925 (083)]. July 2011.

Schwitalla Consulting. 2011. Archaeological Survey Report for the Proposed Salmon Falls Road Realignment Project, El Dorado County, California. May 20, 2011.

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.)

Youngdahl Consulting Group, Inc. 2011a. Phase I Environmental Site Assessment, Salmon Falls Road at Glenesk Lane, Pilot Hill, California 95664. Project No. E09015.012. July 2011.

Youngdahl Consulting Group, Inc. 2011b. Salmon Falls Road at Glenesk Lane, Near Pilot Hill, El Dorado County, California, Result of Naturally Occurring Asbestos Assessment. Project No. E09015.012. August 10, 2011.

Appendix A

Mitigation Monitoring Plan

Mitigation Monitoring and Reporting Plan
for the
**Salmon Falls Road South of Glenesk Lane
Realignment**

**CEQA Lead Agency:
El Dorado County**

Prepared: November 2011

Adopted by Board of Supervisors on: _____

INTRODUCTION

Purpose

El Dorado County (County) has prepared a Mitigated Negative Declaration (MND) for the proposed Salmon Falls Road South of Glenesk Lane Realignment. The MND identified six 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 and Reporting Plan (MMRP) identifies each of the mitigation measures that must be implemented in association with the project, if adopted as part of the MND by the Board of Supervisors. 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 MMRP 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 MMRP. The County will designate a staff member to manage the MMRP. 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 MMRP 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 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 4.4(a): The proposed project has the potential to impact Foothill yellow-legged frog and California red-legged frog.

Mitigation Measure 1: The County shall implement the following measures to minimize impacts on Foothill yellow-legged frogs (FYLF) and California red-legged frogs (CRLF):

- Wetted channel segments, areas of riparian scrub, and other Environmentally Sensitive Areas within the project study 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 FYLF/CRLF survey of the project site 48 hours before the onset of work activities. If any FYLF/CRLF are 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 FYLF/CRLFs the shortest distance possible to a location that contains suitable habitat that 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 channels 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.
- Portions of the project area that are temporarily impacted shall be revegetated with an assemblage of native vegetation suitable for the area. Locally collected plant materials shall be used to the extent practicable. Invasive, exotic plants shall be controlled to the maximum extent practicable. 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 dry 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 BMPs 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.
- The monitoring biologist shall permanently remove any individuals of exotic species, such as bullfrogs, 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(a): The proposed project has the potential to impact tricolored blackbird (TCBB) breeding habitat.

Mitigation Measure 2: If construction activities are initiated after March 1, pre-construction bird surveys shall be performed to determine the location of nest sites within the project area. A 100-foot buffer zone shall be established around active TCBB nests within the project area unless CDFG permits a reduced buffer zone based on nesting phenology and recommendation(s) of a biological monitor.

Construction activities shall be confined to the project area to minimize the effects on wildlife occurring adjacent to the project area. Construction equipment shall be required to have functional mufflers and properly tuned and maintained in a manner to reduce noise levels.

Implementation: The County will retain the services of a qualified biologist to conduct pre-construction TCBB surveys, if construction is initiated after March 1, and will implement the measures as described above.

Effectiveness Criteria: The County shall prepare and keep on file documentation verifying the results of the pre-construction surveys.

Timing: Pre-Construction Phase

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

Impact 4.4(a): Tree removal and/or ground clearing activities associated with the proposed project could impact listed bird species and bird species protected under the MBTA.

Mitigation Measure 3: The following measures shall be implemented to reduce project impacts on bird species:

- Minimize removal of native vegetation by locating staging areas and access routes in previously disturbed areas;
- Removal of vegetation shall be conducted in the fall and winter (between September 15 and March 1) after fledging and before the initiation of breeding activities;
- If construction activities are initiated after March 1, pre-construction bird surveys shall be performed to determine the location of nest sites within the project area. A 100-foot buffer zone shall be established between active passerine nests within the project area, and a 500-foot buffer zone between active raptor nests within or adjacent to the project area, unless CDFG permits a reduced buffer zone based on nesting phenology and recommendation(s) of a biological monitor;
- Construction activities shall be confined to the project area to minimize the effects on wildlife occurring adjacent to the project area. Construction equipment shall be required to have functional mufflers and properly tuned and maintained in a manner to reduce noise levels.

Implementation: The County will retain the services of a qualified biologist to conduct pre-construction surveys for nesting listed bird species and/or bird species protected under the MBTA and will implement the measures as described above. This mitigation measure shall be included in the construction bid documents for this project.

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 biologist conducting the pre-construction surveys for nesting listed bird species and/or bird species protected under the MBTA. The County will also 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 4.5(a, b, and d): Construction activities could potentially disturb unknown cultural resources.

Mitigation Measure 4: Any and all potential archaeological resources discovered during construction shall be examined by a qualified archaeologist, who shall examine the findings, assess their significance, and offer recommendations for appropriate handling procedures. Work within 100 feet of the find shall cease.

In the event that unanticipated historical or archeological resources (including structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains) are encountered during construction, all earthmoving activity shall cease until the developer retains the services of a qualified archaeologist. The archaeologist or paleontologist shall examine the findings, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts to those cultural or paleontological archaeological resources that have been encountered (e.g., excavate the significant resource). If human remains are discovered, the County is subject to the provisions of the California Health and Safety Code Section 7050.5 and California PRC Section 5097.94 et seq., regarding the discovery and disturbance of human remains should any be discovered during project construction.

Implementation: In the event that construction contractors retained by the County unearth potential historical or archaeological resources, or any human remains as identified in the mitigation language above, the County will retain the services of a qualified archaeologist to examine the findings, assess their significance, and offer recommendations for appropriate handling procedures.

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-interment 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 cultural resources.

Timing: Throughout Construction Phase

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

Impact 4.5(a, b, and d): Construction activities have the potential to result in the release of lead into the environment.

Mitigation Measure 5: Removal of the centerline paint striping within the project area shall be performed by a licensed hazardous waste contractor. The centerline paint striping shall be disposed of in accordance with applicable rules and regulations.

Implementation: The County will retain the services of a licensed hazardous waste contractor to remove the centerline paint striping within the project area and will implement the measures as described above.

Effectiveness Criteria: The County shall prepare and keep on file documentation verifying the results of the centerline paint striping removal process.

Timing: Throughout Construction Phase

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

Impact 4.12(b): Construction activities have the potential to expose people to or generate excessive groundborne vibration or groundborne noise levels.

Mitigation Measure 6: The County and/or its construction contractors shall notify property owners within 1,200 feet of the project area of potential road closures and the estimated schedule for blasting activities. Notifications shall be issued by the County and/or its construction contractors within one week in advance. Controlled blasting shall conform to all Federal, State, and local regulations.

Implementation: The County will notify property owners within 1,200 feet of the project area of potential road closures and the estimated schedule for blasting activities and will implement the measures as described above.

Effectiveness Criteria: The County shall prepare and keep on file documentation verifying the notification process.

Timing: Prior to Blasting Activities

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