Initial Study/ Mitigated Negative Declaration

for the

Hazel Valley Road at El Dorado Canal Bridge (25C0092) Replacement Project

March 2015

El Dorado County
Community Development Agency
Transportation Division
2850 Fairlane Court
Placerville, CA 95667

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1. Project Information

1. Project Title:

Hazel Valley Road at El Dorado Canal Bridge (25C0092) Replacement Project

2. Lead Agency Name and Address:

El Dorado County Community Development Agency, Transportation Division 2850 Fairlane Court

Placerville, CA 95667

3. Contact Person and Phone Number:

Ms. Janet Postlewait, Principal Planner 530/621-5993 janet.postlewait@edcgov.us

4. Project Location:

The Project is located along Hazel Valley Road approximately 0.5 mile south of Highway 50 and 5 miles east of the community of Pollock Pines in central El Dorado County, CA. The bridge is located approximately 1,000 ft due west of Esmeralda Creek on the Riverton USGS topographic quad (T11N, R13E, Section 35) and occurs in the South Fork American hydrologic unit (hydrologic unit code 18020129). Elevation in the Project area ranges from approximately 3,850 ft to 3,865 ft above sea level

The Project area includes portions of Hazel Valley Road, Ponderosa pine forest, and a segment of the concrete lined El Dorado Canal. The El Dorado Canal flows south through the Project area. The Project area is bound by Ponderosa pine forest on all sides. The General Plan land use designation for the parcel (APN 009-060-29-100) surrounding the Project area is natural resources and the zoning is timberland preserve.

5. Description of Project:

El Dorado County Community Development Agency, Transportation Division, in conjunction with Caltrans and FHWA, is proposing to replace the Hazel Valley Road Bridge at the El Dorado Canal (25C0092). Hazel Valley Road in the Project area is a one lane rural road in mixed conifer forest on the west slope of the Sierra Nevada. The existing bridge built in 1940 is a single-span structure with a timber deck on steel girders and concrete abutments. The existing bridge is approximately 27.5 ft long and 10.8 ft wide (curb to curb).

The proposed replacement bridge will be an approximately 54 ft long, 28 ft wide concrete slab bridge. The bridge will be installed on concrete abutments with cast in drilled hole (CIDH) piles. Concrete bridge rails are proposed. The new bridge will meet the AASHTO minimum standards for a "Resource Recovery Road" or a "Minor Access Road" (AASHTO 2001).

The road will remain open during construction and motorists will make use of the existing bridge or a temporary bridge during construction. Pedestrian access along the canal berm will be maintained to facilitate canal inspection. The El Dorado Canal is owned and operated by the El Dorado Irrigation District (EID). The County will continue its coordination with EID prior to and during construction.

6. General plan designation:

Natural Resources (NR, 1 DU per 40 ac below 3,000 ft elevation, 1 DU per 160 ac above 3,000 ft elevation)

7. Zoning:

Timberland Preserve Zone (TPZ)

8. Surrounding Land Uses and Setting:

Adjacent land use includes timber production. Hazel Valley Road is classified as an off-system, two-lane, local rural road in El Dorado County. The El Dorado Canal is a 22.3-mile long canal owned and operated by EID as part of the El Dorado Hydroelectric Project licensed by the Federal Energy Regulatory Commission (FERC). The El Dorado Canal is a manmade concrete-lined canal with a maximum flow capacity of 165 cubic feet per second that passes under Hazel Valley Road in the project area.

9. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement):

The Project may require permits or approvals from the following:

- Caltrans National Environmental Policy Act (NEPA) Categorical Exclusion
- El Dorado County Air Quality Management District Fugitive Dust Plan Approval

2. Introduction

The El Dorado County Community Development Agency, Transportation Division, (Transportation) intends to replace the existing Hazel Valley Road Bridge at the El Dorado Canal (25C0092) located in unincorporated El Dorado County. The existing single lane timber bridge structure was constructed in 1940.

El Dorado County is the local lead agency and prepared this Initial Study to consider the significance of potential project impacts pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Section 21000, et seq.). This Initial Study was prepared in accordance with 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 would have less than significant impacts on the environment with the incorporation of mitigation measures. The County may approve the Project with the certification of a Mitigated Negative Declaration (MND).

The remainder of this document is organized into the following sections:

- Section 3, Project Description: Provides a detailed description of the proposed Project;
- Section 4, Initial Study Checklist and Supporting Documentation: Provides CEQA Initial
 Study Resource impact checklists and supporting documentation. Identifies the thresholds of
 significance, evaluates potential impacts, and describes mitigation necessary to reduce impact
 significance;
- Section 5, Initial Study Findings: Provides a determination of the County's CEQA findings;
- **Section 6, Supporting Information Sources:** Identifies the personnel responsible for the preparation of this document and provides a list of the references cited throughout the document.
- Appendix A, Mitigation Monitoring and Reporting Plan: Contains the Mitigation Monitoring and Reporting Plan prepared for the proposed project. The Mitigation 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.

3. Project Description

3.1 Location

The Project area is located along Hazel Valley Road approximately 0.5 mile south of Highway 50 and 5 miles east of the community of Pollock Pines in central El Dorado County (Figures 1 and 2). The bridge crosses the El Dorado Canal between Ditch Camp Three and Ditch Camp Four and is approximately 1,000 ft west of Esmeralda Creek. The Project occurs on the Riverton USGS topographic quad (T11N, R13E, Section 35) and is in the South Fork American hydrologic unit (hydrologic unit code 18020129). Elevation in Project area ranges from approximately 3,850 ft to 3,865 ft above sea level.

3.2 Project Purpose and Objectives

The purpose of the Project is to replace the existing Hazel Valley Road Bridge (25C0092) at EID Canal. Project objectives include improving roadway safety, reducing annual maintence costs, increase the life of the bridge, compliance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines, and compliance with El Dorado County standards. This Project is identified in the El Dorado County Capital Improvement Program as project # 77125 (El Dorado County 2013).

Replacement of the structure is necessary due to the following deficiencies (El Dorado County 2014a):

- **Service Life:** The existing bridge is 74 years old (at present). The assumed service life is 75 years.
- **Unknown Abutment Reinforcement/Strength:** The type and strength of the existing abutment supports is unknown.
- **Sub-Standard Width/Functionally Obsolete Classification:** The 2013 Caltrans bridge inspection report states the bridge is "Functionally Obsolete" because the existing clear width between railings is 10-feet 10-inches which is less than the two way existing approach roadway widths of 20-feet
- **Substandard Wheel Guards and Railings:** As noted in the 2013 Caltrans bridge inspection report and County bridge maintenance reports the existing timber wheel guards and timber railings and posts are hit by vehicles numerous times each year and require repair by County Bridge Maintenance staff at least twice a year historically.
- **Gravel, Dirt Debris and Accelerating Dry Rot Issues:** Vehicles using the bridge track dirt and debris onto the bridge deck. The gravel and dirt tend to retain moisture thus accelerating dry rot and shortening the design life of the timber. Dirt and debris also filters down through the openings in the timber deck which contributes to the corrosion of the supporting I-beam superstructure.
- Substandard Approach Roadway Geometrics and Sight Distance: The approach roadway does not meet AASHTO requirements for minimum horizontal and vertical curve radius and sight distance.
- Seismic Analysis and Retrofit: The Hazel Valley Road Bridge was constructed before modern bridge seismic codes had been developed. Bridges constructed during this time typically were not designed to satisfy current seismic requirements.

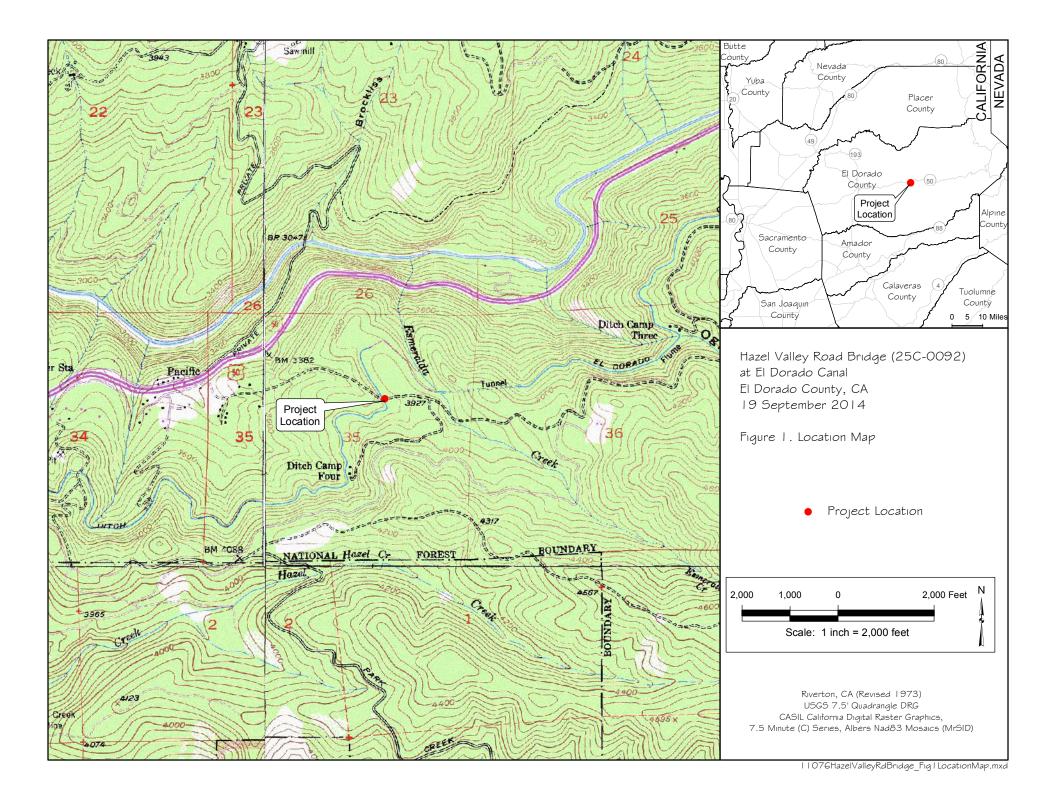
3.3 Project Description

The existing bridge built in 1940 is a single-span structure with a timber deck on steel girders and concrete abutments. The existing bridge is approximately 27.5 ft long and 10.8 ft wide (curb to curb). The proposed replacement bridge will be an approximately 54 ft long, 28 ft wide concrete slab bridge. The bridge will be installed on concrete abutments with cast in drilled hole (CIDH) piles. The piles may be 10 ft deep, depending on the results of the geotechnical study. Concrete bridge rails are proposed. Figure 3 shows the proposed project and Figures 4 and 5 include the current proposed plan and profile design sheet. The new bridge will meet the AASHTO minimum standards for a "Resource Recovery Road" or a "Minor Access Road" (AASHTO 2001).

The road will remain open during construction and motorists will make use of the existing bridge or a temporary bridge during construction. The County is evaluating several alignments for the new bridge. The replacement bridge may be constructed along its existing alignment, requiring the installation of a temporary bridge (likely to the south of the existing bridge); or the replacement bridge may be constructed north of its existing alignment, allowing the existing bridge to serve as access during construction. Both alignments will have similar environmental impacts; neither alignment will encroach on the canal. Pedestrian access along the canal berm will be maintained to facilitate canal inspection. The El Dorado Canal is owned and operated by the El Dorado Irrigation District (EID). The County will continue its coordination with EID prior to and during construction.

The demolition of the existing bridge will be completed by the construction contractor. The contractor will likely use jack-hammers, excavators, and/or cranes. Netting, tarps or platforms may be used during demolition to prevent debris from entering the canal. Debris will be removed from the project area and disposed of properly.

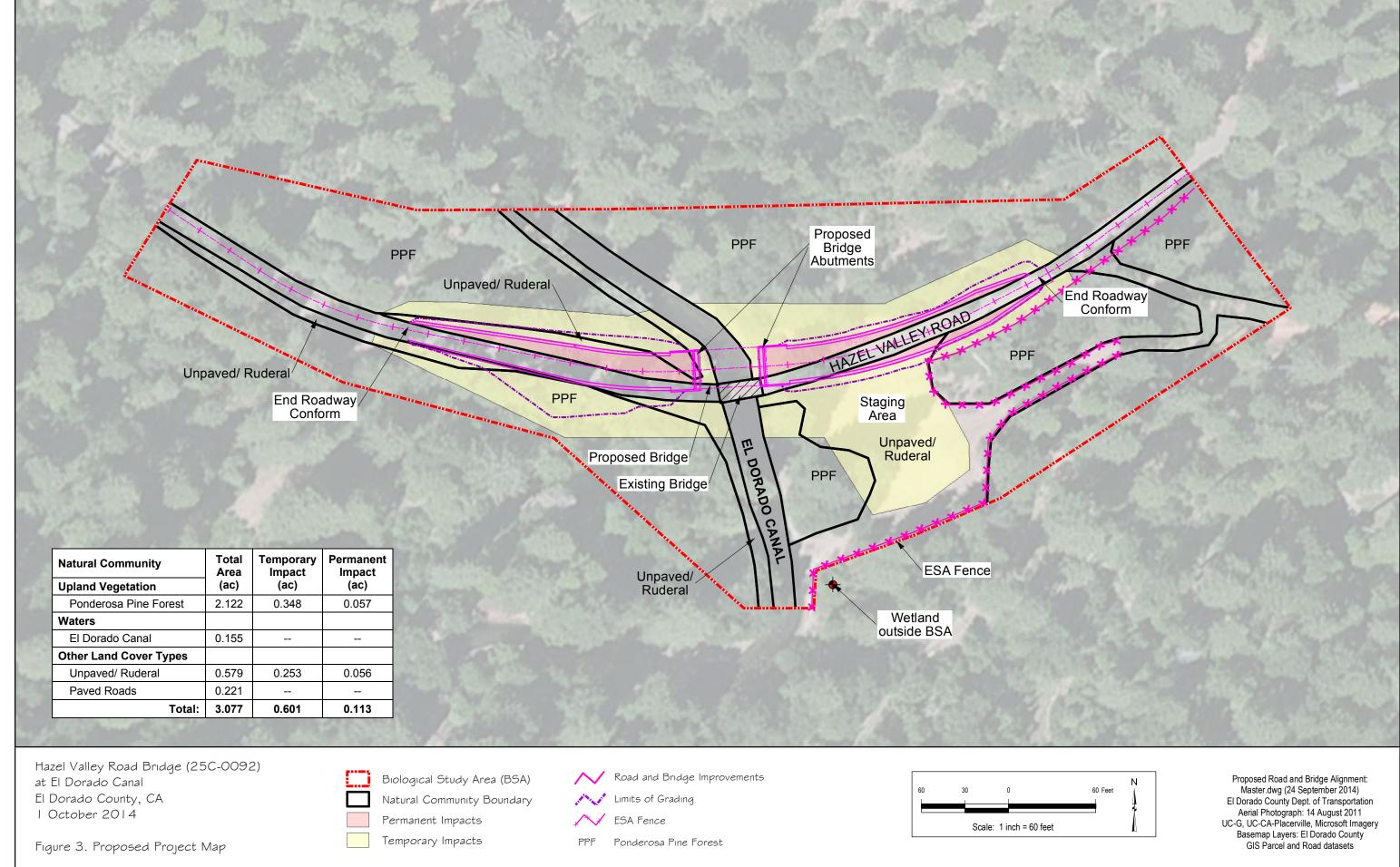




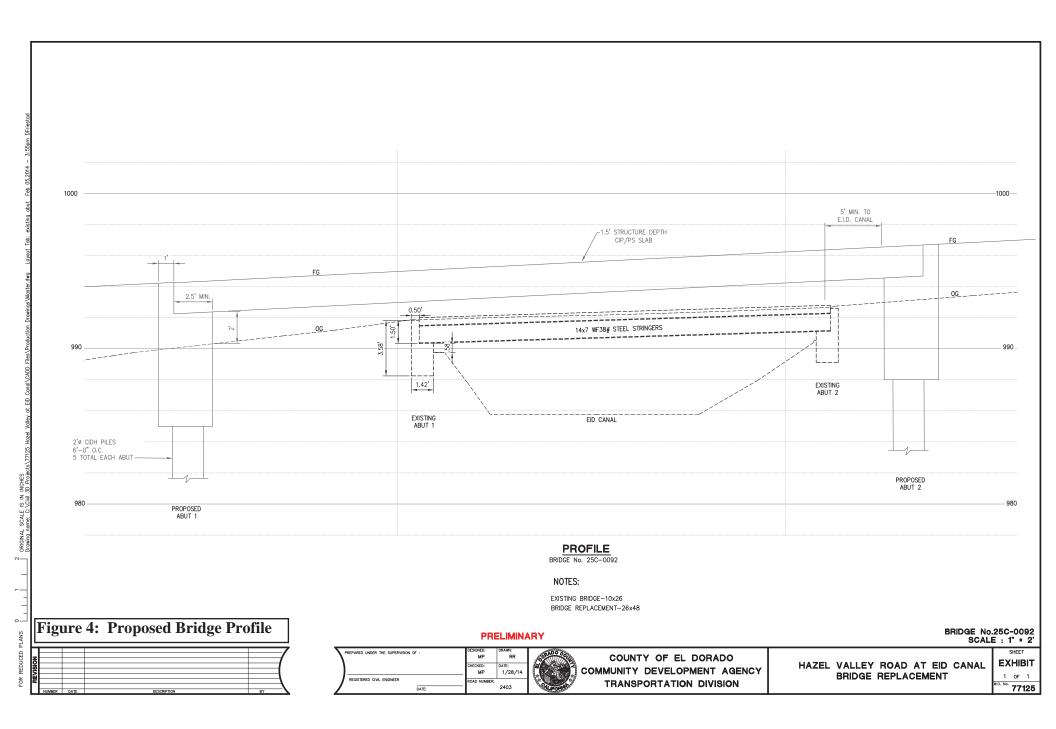
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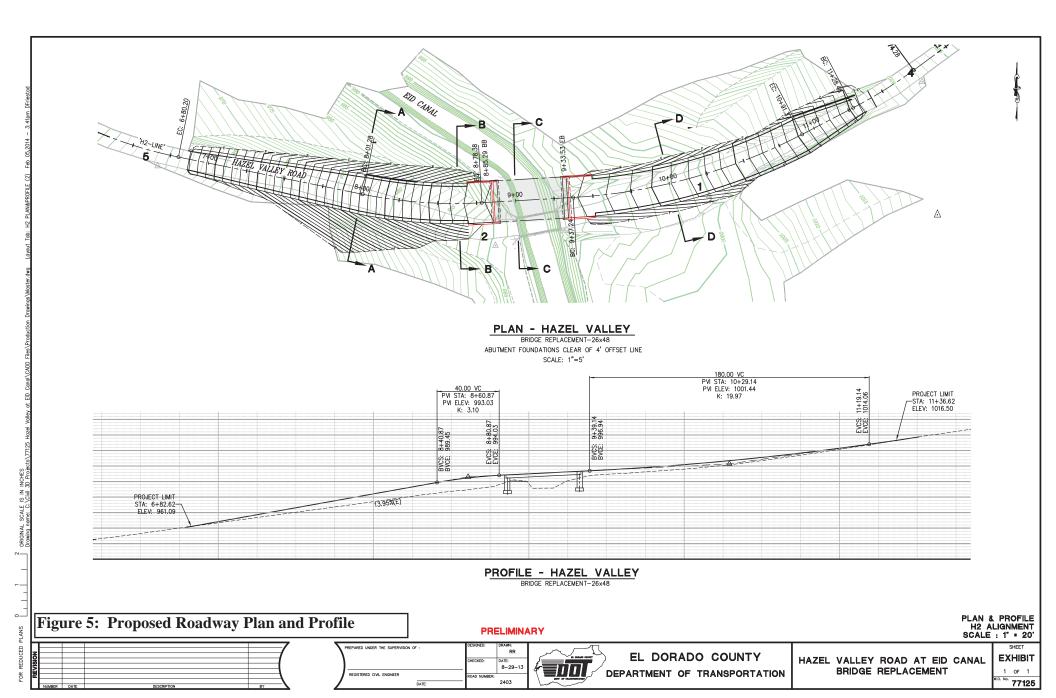






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3.4 Construction Contract

Transportation would retain a construction contractor to construct the proposed improvements. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed Project activities and for implementing construction-related mitigation measures. Transportation would provide construction contractor oversight and management and would be responsible for verifying implementation of the mitigation measures. The contractor would construct the proposed Project in accordance with the Public Contract 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 Transportation. The following are a combination of standard and project-specific procedures/requirements applicable to Project construction:

- Construction contract special provisions will require that a Traffic Management Plan be prepared.
 The Traffic Management Plan will include construction staging and traffic control measures to be
 implemented during construction to maintain and minimize impacts to traffic during construction.
 The Traffic Management Plan will address the coordination issues;
- Contract special provisions will require compliance with El Dorado County Air Quality Management District (AQMD) Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions;
- Contract provisions will require notification of Transportation and compliance with California
 Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5,
 5097.9 et seq., regarding the discovery and disturbance of cultural materials or human remains
 should any be discovered during project construction;
- Contract provisions will require implementation of best management practices (BMPs) consistent with the Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation.
- Transportation 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;
- Transportation and its construction contractors will comply with the current State of California Standard Specifications written by the State of California Department of Transportation, for public service provision; and
- The Project would comply with El Dorado County General Plan Policy 6.5.1.11 pertaining to construction noise.
- The County will install ESA fencing as shown in the Caltrans approved Cultural Resources documents.
- Contract provisions will require the existing paint system be handled in accordance with Caltrans Standard Special Provisions for removal of lead paint (Provision 14-11.08, Disturbance of Existing Paint Systems on Bridges).



4. Initial Study Checklist and Supporting Documentation

4.1 Initial Study Checklist

This section of the Initial Study incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines. Each resource topic section provides a determination of potential impact and an explanation for the checklist impact questions. The following 18 environmental categories are addressed in this section:

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

Each of the above listed environmental categories was fully evaluated and one of the following four determinations was made for each checklist question:

- "No Impact" means that no impact to the environment would occur as a result of implementing the Project.
- "Less than Significant Impact" means that implementation of the Project would not result in a substantial and/or adverse change to the environment and no mitigation is required.
- "Potentially Significant Unless Mitigation is Incorporated" means that the incorporation of one or more mitigation measures would reduce the impact from potentially significant to less than significant.
- "Potentially Significant Impact" means that there is either substantial evidence that a project-related effect would be significant or, due to a lack of existing information, could have the potential to be significant.

4.2 Setting, Impacts, and Mitigation Measures

4.2.1 Aesthetics

I. AESTHETICS—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impac
a) Have a substantial adverse effect on a scenic vista?			\boxtimes	
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?			\boxtimes	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Environmental Setting

The Project occurs in the Sierra Nevada, at an elevation ranging from of approximately 3,850 ft to 3,865 ft above sea level. The Project is located in rural setting in unincorporated El Dorado County. The Project area includes unpaved/ruderal areas, paved portions Hazel Valley Road, Ponderosa pine forest, and a segment of the concrete lined El Dorado Canal.

Potential Environmental Effects

- a) Less Than Significant Impact. Visual resources consist of two categories: scenic views and scenic resources. As per CEQA Checklist, Scenic resources are described as specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. Scenic views are elements of the broader view shed such as mountain ranges, valleys, and ridgelines. A scenic vista refers to the view of an area that is visually or aesthetically pleasing.
 - Table 5.3-1 of the General Plan EIR identifies multiple scenic views and resources in the County (El Dorado County 2004a). Hazel Valley Road is not identified in Table 5.3-1 of the General Plan EIR. Hazel Valley Road is not a state designated scenic highway.
 - U.S. 50 is a State designated scenic highway from Placerville to South Lake Tahoe. At its closest, U.S. 50 is 0.48 mi from the Hazel Valley Road Bridge. The bridge is over 400 ft higher in elevation than the highway. It cannot be seen from the highway due to terrain and tall trees.
 - The Project consists of replacement of an existing bridge. The replacement bridge will be visually consistent with the existing structure and other transportation infrastructure in the vicinity of the Project. Impacts to the scenic resources are considered less-than significant.
- Less Than Significant Impact. See discussion of a) above. b)
- c) Less Than Significant Impact. See discussion of a) and b) above.
- **No Impact.** The Project does not introduce any new source of light or glare. d)

4.2.2 Agricultural and Forestry Resources

II.	AGRICULTURE AND FORESTRY—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. In determining whether impacts to forest resources,				
	including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project::	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				\boxtimes
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?			\boxtimes	
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest				\boxtimes

Environmental Setting

land to non-forest use?

The Project is located in a rural area in the Sierra Nevada. The Project area is mapped as 'Other Land' by the States Farmland Mapping and Monitoring Program (California Department of Conservation 2014c). 'Other Land' is 'land not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing...'. No Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or lands under Williamson Act contracts occur in the project area. The Project area is located in the area identified as 'Timber Production Zone' on Exhibit 5.2-4 (Timber Production Zones) of the County General Plan EIR (El Dorado County 2004a).

Potential Environmental Effects

- a) *No Impact.* No Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or lands under Williamson Act contracts occur in the project area.
- b) *No Impact.* See response for item a).
- c) *No Impact*. The Project area is located in the area identified as 'Timber Production Zone' on Exhibit 5.2-4 (Timber Production Zones) of the County General Plan EIR (El Dorado County 2004a). County General Plan policies applicable to the project include:
 - "Policy 8.3.1.1: Lands suitable for timber production which are designated Natural Resource (NR) on the General Plan land use map and zoned Timber Production Zone (TPZ) or Forest Resource (FR) are to be maintained for the purposes of protecting and encouraging the production of timber and associated activities.
 - *Policy 8.3.2.1*: Lands zoned Timber Production Zone (TPZ) shall not be subdivided into parcels containing less than 160 acres.
 - *Policy 8.4.2.1*: The County Agricultural Commission shall evaluate all discretionary development applications involving identified timber production lands which are designated Natural Resource or lands zoned Timberland Production Zone (TPZ) or lands adjacent to the same and shall make recommendations to the approving authority. Prior to granting an approval, the approving authority shall make the following findings:
 - A. The proposed use will not be detrimental to that parcel or to adjacent parcels for long-term forest resource production value or conflict with forest resource production in that general area;
 - B. The proposed use will not intensify existing conflicts or add new conflicts between adjacent proposed uses and timber production and harvesting activities;
 - C. The proposed use will not create an island effect wherein timber production lands located between the project site and other non-timber production lands are negatively affected;
 - D. The proposed use will not hinder timber production and harvesting access to water and public roads or otherwise conflict with the continuation or development of timber production harvesting; and
 - E. The proposed use will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjacent to timber production lands."

The proposed Project is consistent with the existing zoning, General Plan policies 8.3.1.1, 8.3.2.1, and 8.4.2.1, and does not include any rezoning activities.

d) Less Than Significant Impact. The proposed Project will result in temporary and permanent impacts forest land (as defined in Public Resources Code section 12220(g)). Temporary impact to approximately 0.348 ac of forest land will result from trees and vegetation removal to allow construction access. Approximately 0.057 ac of Ponderosa pine forest will be permanently affected by construction of the replacement bridge. The permanent loss of less than one-tenth of

- an acre (0.057 ac) of forest land (as defined in Public Resources Code section 12220(g)) is considered less than significant.
- e) **No Impact.** Excluding vegetation impacts the project is not anticipated to involve other changes in the existing environment that could result in conversion of farmland or forest land.

4.2.3 Air Quality

III. AIR QUALITY— 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:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\boxtimes	
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)?				\boxtimes
d) Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e) Create objectionable odors affecting a substantial number of			\boxtimes	

Environmental Setting

The project area is located in the Mountain Counties Air Basin (MCAB). The San Francisco Bay Area Air Basin and the Sacramento Valley Air Basin are located to the west, and the San Joaquin Valley Air Basin is located to the south. Climate in the MCAB relate to elevation and proximity to the Sierra Ridge. Precipitation is greater and temperatures are lower at higher elevations. Summer temperatures in the project area are in the mid- to upper nineties. Winter temperatures are in the upper thirties to lower forties.

The air quality of a region is determined by the air pollutant emissions (quantities and type of pollutants measured by weight) and by ambient air quality (the concentration of pollutants within a specified volume of air). Air pollutants are characterized as primary and secondary pollutants. Primary pollutants are those emitted directly into the air, for example carbon monoxide (CO), and can be traced to a single pollutant source. Secondary pollutants are those pollutants that form through chemical reactions in the atmosphere, for example reactive organic gasses (ROG) and nitrogen oxides (NO_X) combine to form ground level ozone, or smog.

Congress established much of the basic structure of the Clean Air Act in 1970, and made major revisions in 1977 and 1990. The Federal Clean Air Act established national ambient air quality standards (NAAQS). These standards are divided into primary and secondary standards. Primary standards are designed to protect public health and secondary standards are designed to protect other values. Because of

the health-based criteria identified in setting the NAAQS, the air pollutants are termed "criteria" pollutants. California has adopted its own, more stringent, ambient air quality standards (CAAQS).

The Mountain Counties Air Basin portion of El Dorado County is currently nonattainment for the national 8-hour ozone and PM 2.5 standards. The Mountain Counties Air Basin portion of El Dorado County is nonattainment for the following CAAQS: 8-Hour Ozone, 1-Hour Ozone, and 24-Hour PM10.

The El Dorado County Air Quality Management District (AQMD) administers the state and federal Clean Air Acts in accordance with state and federal guidelines. The AQMD regulates air quality through its district rules and permit authority. It also participates in planning review of discretionary project applications and provides recommendations. The following District rules apply to the Project:

- Rule 205 (Nuisance): Prohibits the discharge of air containments which cause injury, detriment, nuisance, or annoyance.
- Rule 207 (Particulate Matter): Limits the quantity of PM through concentration limits.
- Rule 215 (Architectural Coatings): Defines the quantities of reactive organic compounds permitted for use in new construction.
- Rule 223 (Fugitive Dust): The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.
- Rule 223-1 (Fugitive Dust Construction): Requires a Fugitive Dust Control Plan be prepared and submitted to the El Dorado County AQMD prior to ground disturbing activities. Pursuant to Rule 610, the El Dorado County AOMD charges a fee to review the Fugitive Dust Control Plan required by Rule 223-1.
- Rule 223-2 (Fugitive Dust Asbestos Hazard Mitigation): The purpose of this Rule is to reduce the amount of asbestos particulate matter entrained in the ambient air as a result of any construction or construction related activities, that disturbs or potentially disturbs naturally occurring asbestos by requiring actions to prevent, reduce or mitigate asbestos emissions.
- Rule 224 (Cutback and Emulsified Asphalt Paving Materials): Limits emissions of ROGs from the use of cutback and emulsified asphalt paving materials, paving, and maintenance operations.
- Rule 233 (Stationary Internal Combustion Engines): Limits emissions of NOx and CO from stationary internal combustion engines. (This rule applies to any stationary internal combustion engine rated at more than 50 brake horsepower, operated on any gaseous fuel or liquid fuel, including liquid petroleum gas (LPG), gasoline, or diesel fuel.)

El Dorado County AQMD's Guide to Air Quality Assessment (2002) specifies specific daily emissions thresholds that can be used to determine the significance of project emissions. The El Dorado County AQMD considers a significant cumulative impact to occur if the project requires a change in the existing land use designation (i.e., general plan) and would individually exceed the project-level thresholds of significance. Thresholds of significance for specific pollutants of concern are as follows:

• ROG: 82 lbs/day NOx: 82 lbs/day PM10: AAQS

Potential Environmental Effects

As recommended in the *El Dorado County AQMD Guide to Air Quality Assessment* construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's *Road Construction Emissions Model* (RCEM), *Version 7.1.5.1*. The RCEM was developed to estimate emissions from linear projects types including road and bridge construction. The RCEM divides the project into four 'Construction Periods:

- Grubbing/ Land Clearing
- Grading/Excavation
- Drainage/Utilities/Sub-Grade
- Paving

Based on similar County road and bridge projects the assumptions presented in Table 1, regarding type of construction equipment and use duration, were used in the RCEM. Other Project assumptions used in the RCEM include a total four month construction schedule starting in 2018, use of water trucks, and a daily soil import/ export volume of 100 cubic yards. Results of the RCEM based on the Project assumptions are in Table 2.

Table 1. Construction Equipment and Use Assumptions.

	Equ	uipment	Hours per	Days In Use During	
Construction Period	Quantity	Туре	Day Used	Construction Period (Applies to all Equipment)	
	1	Excavator	5		
	1	Backhoe	2		
Grubbing/ Land Clearing	1	Bulldozer	4	8	
	1	Dump Truck	4		
	1	Signal Board	8		
	1	Excavator	5		
Croding/Espaceation	1	Backhoe	2	0	
Grading/Excavation	1	Bulldozer	4	8	
	1	Signal Board	8		
Drainaga/Litilitiag/Sub	1	Backhoe	2		
Drainage/Utilities/Sub- Grade	1	Roller	4	5	
Grade	1	Water Truck	4	3	
	1	Signal Board	8		
	1	Roller	4		
Paving	1	Water Truck	4	5	
	1	Signal Board	8		

Table 2. Estimated Construction Emissions

Project Phases	ROG lbs/day	CO lbs/day	NOx lbs/day	PM10 lbs/day	Exhaust PM10 lbs/day	Fugitive Dust PM10 lbs/day
Grubbing/land clearing	1.0	6.4	8.7	31.2	0.4	15.0
Grading/excavation	1.1	8.0	11.1	31.3	0.5	15.0
Drainage/utilities/subgrade	2.1	13.4	14.0	31.8	1.0	15.0
Paving	1.1	8.6	8.6	0.5	0.5	-
Maximum lbs/day	2.1	13.4	14.0	31.8	1.0	15.0
Significance Threshold	82	AAQS	82	AAQS	N/A	N/A
Significant?	No	No	No	No	N/A	N/A

Notes: Data entered to emissions model: Project Start Year: 2018; Project Length (months): 4; Total Project Area (acres): 3.088; Total Soil Imported/Exported (yd³/day): 100. 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.

- a) *No Impact.* The proposed Project is identified in the Sacramento Council of Governments' *Metropolitan Transportation Plan/Sustainable Communities Strategy 2035* (Sacramento Council of Governments 2012). Projects included in the Metropolitan Transportation Plan have been determined to be consistent with the planning goals of the State Implementation Plan.
- b) **Less Than Significant Impact.** El Dorado County is in nonattainment status for both federal and state ozone standards and 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 tirewear emissions and from paints and coatings.
 - Project construction would create short-term increases in ROG, NOx, and PM10 emissions from vehicle and equipment operation. The RCEM estimates are below the County's significance threshold of 82 lbs/ day each for of ROG and NOx. As per Chapter 4 of the *El Dorado County AQMD Guide to Air Quality Assessment*, if ROG and NOx emissions are below the threshold values (not significant) then CO and PM10 emissions from construction equipment, and exhaust emissions of all constituents from worker commute vehicles are also not significant. The Project would not generate additional traffic on Hazel Valley Road. No operational emissions will result from the Project.
- c) No Impact. Cumulative net increases of criteria pollutants have been evaluated in the Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 (SACOG 2012). This Project is referenced and evaluated in the Metropolitan Transportation Plan/Sustainable Communities Strategy 2035. Also see the response for item b.
 - d) *Less Than Significant Impact*. The Project is located in a rural area and no sensitive receptors (people, or facilities that generally house people; schools, hospitals, residences, etc.) are known to occur within 0.25 mile of the Project. Impacts are considered less than significant due to the limited nature of the Project and short-term construction period.

The Project is not located within an area known to contain naturally occurring asbestos (NOA) or an area "more likely to contain naturally occurring asbestos" (California Department of Conservation 2000, El Dorado County 2005).

e) Less Than Significant Impact. Construction activities would involve the use of construction equipment and asphalt paving, which have distinctive odors. Odors are considered less than significant because of the limited number of the public affected and the short-term nature of the emissions.

4.2.4 Biological Resources

IV. BIOLOGICAL RESOURCES—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				\boxtimes
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?			\boxtimes	
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?				\boxtimes

Environmental Setting

Potential impacts to biological and wetlands resources were evaluated in the Project's Natural Environment Study Minimal Impacts (NES MI; Sycamore Environmental 2014). The NES MI is a standard Caltrans report format for documenting and evaluating the potential Project impacts to biological resources from projects of limited scope and impact. The NES MI concludes the following regarding biological resources:

- The Project area does not provide habitat for federal-listed wildlife or plant species. There is no critical habitat in the Project area and the Project will not affect critical habitat.
- The Project area does not provide habitat for federal-listed anadromous salmonids.
- The Project area does not contain essential fish habitat (EFH) for Pacific salmon.
- The Project will not result in the 'take' of state-listed species or species proposed for listing.
- The Project area provides suitable habitat for birds of prey and birds protected under the Migratory Bird Treaty Act (MBTA).
- The Project area provides suitable habitat for 3 special-status plants ranked by the California Native Plant Society (CNPS). No rare plants were observed during a botanical survey conducted during the evident and identifiable period for special-status plants with potential to occur in the Project area.
- The Project will not impact potential Clean Water Act, Section 404 jurisdictional wetlands or waters of the U.S.

Biological communities that occur in the Project area are shown in Table 3 (Sycamore Environmental 2014). No sensitive natural communities occur in the Project area. A seasonal wetland occurs approximately 10 feet south of and outside the southern Project boundary.

Table 3. Natural Communities in the Project area

Biological Community	Acreage 1	Temporary Impact (ac)	Permanent Impact (ac)
Ponderosa Pine Forest			
Pinus ponderosa Forest Alliance	2.122	0.348	0.057
CDFW Alliance Code 87.010.000 (G5S4) ²			
El Dorado Canal	0.155		
Unpaved/ Ruderal	0.579	0.253	0.056
Paved Roads	0.221		
Total	3.077	0.601	0.113

^TAcres calculated using AutoCAD® functions.

The seasonal wetland located adjacent to and outside the southern Project boundary is approximately 20 foot by 20 foot. Small arroyo willows grow in and around the seasonal wetland and the understory is dominated by fragile-sheathed sedge and cutleaf blackberry.

The Ponderosa pine forest community in the Project Area contains black oak trees. El Dorado County General Plan Policy 7.4.4.4 regulates oak canopy including oak trees occurring outside of oak woodlands.

² Alliance code and rarity rank (G5S4) are from the most recent CDFW list of vegetation alliances and natural communities. State (S) ranks of 1-3 are considered highly imperiled by CDFW (2010b).

Public road safety projects, including the Hazel Valley Road at the El Dorado Canal Bridge Replacement Project are exempt from Policy 7.4.4.4.

Potential Environmental Effects

a) **Potentially Significant Unless Mitigation Incorporated.** The Project area does not provide habitat for federal-listed wildlife or plant species. There is no critical habitat in the Project area and the Project will not affect critical habitat. The Project will not result in the 'take' of state-listed species or species proposed for listing.

The Project area provides potential nesting habitat for birds of prey and birds listed by the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). BIO-1 will be implemented to avoid impacts to birds of prey and birds listed by the MBTA.

Measure BIO-1

Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from 1 February through 31 August.

Swallow

In California, bridge-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Measures should be taken to prevent establishment of cliff swallow nests prior to construction. Techniques to prevent nest establishment include using exclusion devices, removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation, or perform any combination of these. This can be done by:

- The contractor can visit the site weekly and remove partially completed nests using either hand tools or high pressure water; and/or
- Hang netting from the bridge before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.

Birds of Prey and Birds Protected by the Migratory Bird Treaty Act

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.
- Trees scheduled for removal should be removed during the non-breeding season from 1 September to 31 January.
- If construction is scheduled to begin between 1 February and 31 August, a biologist shall conduct a survey for active bird of prey nests within 250 ft and active MTBA bird nests within 100 ft of the BSA from publicly accessible areas within one week prior to construction. The measures listed below shall be implemented based on the survey results.

No Active Nests Found:

• If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary.

Active Nests Found:

- If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities or an injured or killed bird is found, immediately:
 - 1. Stop all work within a 100-ft radius of the discovery.
 - 2. Notify the Engineer.
 - 3. Do not resume work within the 100-ft radius until authorized.
- The biologist shall establish a minimum 250-ft Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-ft ESA around the nest if the nest is of an MBTA bird other than a bird of prey.

Table 4. Bird Species Protection Areas

Protected Bird Type	Size of Protection Area (ESA)
Bird of prey	250 ft no-disturbance buffer
MBTA protected bird (not bird of prey)	100 ft no-disturbance buffer

- Activity in the ESA will be restricted as follows:
 - 1. Do not enter the ESA unless authorized.
 - 2. *If the ESA is breached, immediately:*
 - a. Secure the area and stop all operations within 60 feet of the ESA boundary.
 - b. Notify the Engineer.
 - 3. If the ESA is damaged, County determines what efforts are necessary to remedy the damage and who performs the remedy.
- No construction activity will be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.
- The size of an ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. Reduction of ESA size depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific factors.
- Between 1 February and 31 August, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.
- If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

- The Project area provides suitable habitat for 3 special-status plants ranked by the California Native Plant Society (CNPS). These species were not observed in the Project during a botanical survey conducted during the evident and identifiable period. No impact will occur.
- b) **No Impact.** No sensitive natural communities occur in the Project area. The Project will not impact potential Clean Water Act, Section 404 jurisdictional wetlands or waters of the U.S.
- c) Less Than Significant Impact. The Project has been designed to avoid impacts to potential water of the U.S. including wetlands as defined by Section 404 of the Clean Water Act. The seasonal wetland located adjacent to and outside the southern Project boundary will be avoided and no impacts are anticipated. Implementation of BIO-2 will further reduce potential impacts to the seasonal wetland located adjacent to an outside the southern Project boundary.

Measure BIO-2

- Temporary fencing will be installed between the construction limits and the seasonal wetland.
- Signs will be posted on the fencing notifying the construction crew that the area beyond is an Environmentally Sensitive Area (ESA) and that no personnel or equipment pass beyond the fencing.
- Water-permeable erosion control measures will be installed along the temporary fence line to ensure that sediment does not migrate south of the fence.
- The temporary fencing and water-permeable erosion control measures will be in place prior to commencement of construction.
- Less Than Significant Impact. The Project area is not located within a County-designated d) Important Biological Corridor (El Dorado County 2004b). Construction of the project could temporarily disrupt movement of native wildlife species that occur in or adjacent to the Project area. Daytime construction activities will result in minimal disruption of nocturnal wildlife movement. If nighttime construction activities would alleviate traffic congestion and safety hazards it would comply with the noise standards for construction activities General Plan Policy 6.5.1.11. The lack of nearby development provides ample space for wildlife to easily avoid the construction site. Although construction disturbance may temporarily hinder wildlife movements within the project area, the impact is less than significant due to its short-term nature.
- e) **No Impact.** The Project area does not include oak woodlands. The Ponderosa pine forest community in the Project Area contains black oak trees. El Dorado County General Plan Policy 7.4.4.4 regulates oak canopy including oak trees occurring outside of oak woodlands. Public road safety projects, including the Hazel Valley Road at the El Dorado Canal Bridge Replacement Project are exempt from Policy 7.4.4.4.
- f) **No Impact.** The Project is not located in an area covered by a habitat or natural community conservation plan. El Dorado County is currently preparing an Integrated Natural Resources Management Plan to identify important habitats in the county and establish a program for the management and preservation of these areas. The plan is still in process and is not anticipated to be adopted until after this Project has been completed.

4.2.5 Cultural Resources

V. CULTURAL RESOURCES—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			\boxtimes	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes
d) Disturb any human remains, including those interred outside of formal cemeteries?			\boxtimes	

Environmental Setting

Tremaine & Associates, Inc. (Tremaine) prepared an Archaeological Survey Report (ASR) for the Project (Tremaine 2014). The ASR included a records search and literature review, an intensive pedestrian survey, and consultation with the Native American community and local preservation societies.

The archaeological Area of Potential Effects (APE) occupies approximately 3.08 acres, which includes a paved portion of Hazel Valley Road, a segment of the El Dorado Canal, unpaved graded areas, and unpaved vegetation areas. Because ground-disturbing work will occur as a result of implementing the proposed project, the proposed project has the potential to affect historic and prehistoric cultural resources, including any historic properties within the APE, if present.

The existing bridge was built in 1940 and is classified as structurally deficient. Mead & Hunt prepared a draft Historical Resources Evaluation Report (HRER) for the Project (Mead & Hunt 2015). The purpose of the HRER is to identify built environment resources that are 50 or more years old within the APE and evaluate eligibility for listing in the National Register of Historical Places (National Register) and California Register of Historical Resources. Based on archival research and field investigation, three properties were identified in the APE for evaluation. The report concludes that one of the properties, the EID Canal (historically known as the El Dorado Canal), was previously determined not eligible for listing in the National Register of Historic Places (National Register) by the California State Historic Preservation Office (SHPO) in 2008. Hazel Valley Road has been evaluated during a pervious study of roads associated with the El Dorado Canal and determined not eligible. The existing bridge 25C-0092 was evaluated and was recommended not eligible for listing in the National Register or the California Register (Mead & Hunt 2015).

An intensive pedestrian survey was conducted of the APE on 23 October 2013. The presence of a previously recorded archaeological site, an 1870–1920 ditch maintenance camp, was confirmed during the survey. This site will be treated as eligible for the purposes of the proposed project. No other archeological or historic resources were observed.

Potential Environmental Effects

- **No Impact.** An intensive pedestrian survey and records search were conducted in support of the a) ASR. No historic resources were discovered in the Project area (Tremaine 2014). The existing bridge was built in 1940 and is classified as structurally deficient. No eligible built environment resources occur in the Project area (Mead & Hunt 2015).
- b) Less Than Significant Impact. The presence of one previously recorded archaeological site was confirmed during the pedestrian survey. No excavation is planned to occur in the exiting staging area located in the southeast portion of the Project area. The use of the existing regularly graded staging area during construction of the proposed Project will not have any effect on the previously recorded archaeological site. As a precautionary measure to ensure avoidance of the previously recorded archaeological resource the County will implement CULT-1 as described below.

Measure CULT-1

- The County will install ESA fencing as shown in the Caltrans approved ESA Action Plan.
- **No Impact.** Paleontological resources in El Dorado County are associated with limestone cave c) deposits, occurrences of the Mehrten formation, and Pleistocene channel deposits (El Dorado County 2004a). Because these resources do not occur in the project area, no impact will occur. The site does not contain any other unique geologic features.
- Less Than Significant Impact. The Project ASR documents that no known cemeteries or burials d) occur within the project study area (Tremaine 2014). Should human remains be discovered during the excavation portion of the Project, the project description includes contract provisions that will require notification of Transportation and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.9 et seq.

Geology and Soils 4.2.6

VI. GEOLOGY AND SOILS—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
 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?				
ii) Strong seismic ground shaking?				\boxtimes
iii) Seismic-related ground failure, including liquefaction?				\boxtimes
iv) Landslides?				\boxtimes
b) Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and				\boxtimes

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?		\boxtimes	
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?			

Environmental Setting

Regional Geology: El Dorado County is located in the Sierra Nevada geomorphic province of California, east of the Great Valley province and west of the Range and Basin provinces. Steep-sided hills and narrow rocky stream channels characterize the Sierra Nevada province. This province consists of Pliocene and older deposits that have been uplifted as a result of plate tectonics, granitic intrusion, and volcanic activity. Subsequent glaciations and additional volcanic activity are factors that led to the east-west orientation of stream channels. (El Dorado County 2004a).

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. 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 2004a).

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 2004a).

Fault Systems: Earthquakes are associated with the fault systems 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 fault traces, landslides, or other geologic hazards are mapped crossing or directly adjacent to the project site (Taber 2014).

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. All other faults located in El Dorado County are classified as pre-Quaternary (inactive).

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

The only mapped soil unit in the Project area Josephine gravelly loam, 9 to 15 percent slopes. The Josephine soil series consists of well-drained, acidic soils that are underlain by vertically tilted schist, slates, and contact metamorphic rocks (Sycamore Environmental 2014).

Potential Environmental Effects

- a) **a-i) No Impact.** No active faults have been identified in El Dorado County. Therefore, the Project will not rupture a fault mapped on the most recent Alquist-Priolo Earthquake Fault Zoning Map. **a-ii) No Impact.** The Project is not in a seismic hazard zone (California Department of
 - *a-ii*) *No Impact.* The Project is not in a seismic hazard zone (California Department of Conservation 2014b).
 - *a-iii*) *No Impact.* No portion of El Dorado County occurs in a Seismic Hazard Zone (i.e., regulatory zones that encompass areas prone to liquefaction and earthquake-induced landslides) based on the Seismic Hazards Mapping Program administered by the California Geologic Survey (CGS). Consequently, El Dorado County and the Project site are not considered to be at risk from liquefaction hazards.

Soils observed during test borings on-site were generally dense and contained significant fines. Groundwater encountered was near the top of rock surface. Based on these observations the potential for liquefaction is considered low (Taber 2014).

- *a-iv*) *No Impact.* No portion of El Dorado County occurs in a Seismic Hazard Zone (i.e., regulatory zones that encompass areas prone to liquefaction and earthquake-induced landslides) based on the Seismic Hazards Mapping Program administered by the California Geologic Survey (CGS). Consequently, El Dorado County and the Project site are not considered to be at risk from earthquake-induced landslides. No fault traces, landslides, or other geologic hazards are mapped crossing or directly adjacent to the project site (Taber 2014).
- b) Less Than Significant Impact. Measure Hydro-1 will require implementation of best management practices (BMPs) consistent with the Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation. Construction activities will include implementation of stormwater runoff best management practices (BMPs). Application of these requirements and measures would prevent substantial erosion or topsoil loss. Areas temporarily disturbed will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species. No seed of nonnative species will be used unless certified to be sterile.
- c) *No Impact.* The project area is underlain by granitic bedrock of Mesozoic age (California Department of Conservation 2014a). No fault traces, landslides, or other geologic hazards are mapped crossing or directly adjacent to the project site (Taber 2014). Soils on site are not susceptible to landslide, lateral spreading, subsidence, liquefaction, or collapse. No impacts are anticipated from unstable soil.
- d) *Less Than Significant Impact.* The gravelly loam soils in the Project area have a low shrink-swell potential (NRCS 1974).
- e) *No Impact.* The proposed Project is a surface transportation project. Septic tanks and alternative wastewater disposal systems are not part of the Project.

4.2.7 Greenhouse Gas Emissions

	Potentially Significant			
VII. GREENHOUSE GAS EMISSIONS—Would the project:	Potentially Significant Impact	Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

Environmental Setting

Greenhouse gases (GHGs) are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide (OPR 2008). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Greenhouse gas emissions for transportation projects can be divided into those produced during operations and those produced during construction. The proposed Project does not increase the capacity of Hazel Valley Road and would not increase operational GHG levels. The discussion below therefore focuses on construction related GHG emissions of the Project.

The El Dorado County Air Quality Management District's (EDCAQMD) has not adopted GHG emissions significance thresholds for development projects. Given the lack of locally adopted GHG emissions significance thresholds the EDCAQMD recommends using significance criteria adopted by the San Luis Obispo Air Pollution Control District (SLOAPCD) to determine the significance of GHG emissions for CEQA. SLOAPCD developed the GHG Emissions Significance Thresholds table below. Projects to "screen out" those below the thresholds as their impacts would be less than significant.

SLOAPCD GHG Emissions Significance Thresholds.

Significance Determination Thresholds				
GHG Emission Source Category Operational Emissions				
Non-stationary Sources	1,150 MTCO ₂ e/yr			
	OR			
	4.9 MT CO ₂ e/SP/yr			
Stationary Sources	10,000 MTCO ₂ e/yr			

SP = service population, which is resident population plus employee population of the project

Potential Environmental Effects

a) *Less Than Significant Impact*. The proposed Project does not increase the capacity of Hazel Valley Road and would not increase operational GHG levels. Construction of the proposed Project

would generate short-term emissions of greenhouse gases. The Sacramento Metropolitan Air Quality Management District (SMAQMD's) *Roadway Construction Emissions Model* (RCEM) *Version 7.1.5.1* was used to estimate reactive organic gasses (ROG) and CO2 emissions from the proposed Project. The same RCEM assumptions used in the air quality analysis were used here. GHG emissions generated by Project construction would be primarily in the form of CO2. Emission of other GHGs, such as CH4 and N2O, are important with respect to global climate change but the emissions levels of these other GHGs from on and off-road vehicles used during construction are relatively small compared to the level of CO2 emissions, even when factoring in

the relatively larger global warming potential of CH4 and N2O. Therefore the primary focus of

this analysis is the level of CO2 emissions from construction of the Project.

The EPA's 'Greenhouse Gas Equivalencies Calculator' provides users a means to convert various emissions data into CO2 equivalencies (CO2e). Results from the Roadway Construction Emissions Model were entered into the EPA calculator to determine the total estimated Project CO2e. The Project will require a total construction period of approximately 4 months or 122 days to complete. The total CO2e estimate was then converted to provide a yearly CO2e estimate.

Based on the Roadway Construction Emissions Model Project construction is estimated to produce approximately:

- ROG = 0.1 MT for Project.
- CO2 = 94.2 MT for Project

Using the EPA CO2e calculator the total estimated Project CO2e is approximately 96.7 MT. On a yearly basis this equals approximately 32 MTCO2e. The County has not yet quantified thresholds for construction activities. However, the construction emissions would be well below the lowest SLOAPCD threshold (1,150 MTCO2e/yr) for non-stationary sources. Project impacts are considered less than significant.

It is important to note that the SLOAPCD threshold was developed to evaluate operational GHG emissions and does not specifically apply to construction emissions. Since construction emissions are temporary, as opposed to annual, utilizing the SLOAPCD operational threshold represents a conservative assessment of potential construction impacts.

b) Less Than Significant Impact. EDCAQMD has not yet adopted a qualified plan, policy, or regulation to reduce GHG emissions. Therefore, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is Assembly Bill (AB) 32, which codified the State's future GHG emissions reduction targets.

ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32. The Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions. These strategies are geared towards sectors and activities that generate significant amounts of GHGs. For example, the majority of measures address building, energy, waste and wastewater generation, goods movement, on-road transportation, water usage, and high global warming potential gases. Activities associated with the Project are not considered by the AB 32 Scoping Plan as having a high potential to emit GHGs. This statement is substantiated by the project-level emissions analysis, which demonstrates that the GHG emissions are well below the lowest SLOAPCD threshold (1,150 MTCO2e/yr) for non-stationary sources. Consequently, none

of the AB 32 reduction strategies are applicable to construction of the project. Implementation of the Project would not conflict with implementation of AB 32.

4.2.8 Hazards and Hazardous Materials

VIII.HAZARDS AND HAZARDOUS MATERIALS—Would	Potentially Significant	Potentially Significant Unless Mitigation	Less Than Significant	
the project:	Impact	Incorporated	Impact	No Impact
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?		\boxtimes		
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?				\boxtimes
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?			\boxtimes	

Environmental Setting

A regulatory agency database review for locations included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (The Cortese list') was conducted as part of the Project scoping process. No listed hazardous materials or waste sites were reported within or near the project site. Based on County records, regulatory database searches, and site visits, there are no signs of or any known hazardous materials in or adjacent to the project site. The existing bridge paint system may contain lead and the concrete abutments could possibly contain asbestos material.

Potential Environmental Effects

- Less Than Significant Impact. Small amounts of hazardous materials would be used during a) construction activities (i.e., equipment maintenance, fuel, solvents, roadway resurfacing and restriping 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. Use of hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazard materials would have a less-than-significant impact.
- **Potentially Significant Unless Mitigation Incorporated.** Based on County records, regulatory b) database searches, and site visits, there are no signs of or any known hazardous materials. The existing bridge paint system may contain lead and the concrete abutments could possibly include asbestos containing material (ACM). Implementation of HAZ-1 will reduce potential impacts to less than significant

Measure HAZ-1

- Contract provisions will require testing of the existing concrete abutments for asbestos containing material (ACM) and the existing paint system for and lead prior before bridge demolition and removal.
- Contract provisions will require the existing paint system be handled in accordance with Caltrans Standard Special Provisions for removal of lead paint (Provision 14-11.08, Disturbance of Existing Paint Systems on Bridges).
- Contract provisions will require ACM be handled in accordance with Caltrans Non-Standard Special Provisions for 14-11.11, Management of Asbestos Containing Materials.
- **No Impact.** No existing or proposed schools occur within 0.25 mile of the Project site. The c) closest schools are located in Pollock Pines approximately 5 miles west of the Project site. As noted above, the Project would involve the short- term handling of hazardous materials during construction. Handling and storage of hazardous materials during construction would comply with all applicable local, state, and federal standards.
- d) **No Impact.** No listed hazardous materials or waste sites occur within or near the project site.
- e) **No Impact.** The Project is not located within two miles of a public airport or public use airport and no private air strips occur in close proximity to the Project.
- f) *No Impact.* See response of item e) above.
- Less Than Significant Impact. The Project will not require a detour. Hazel Valley Road will g) remain open during construction and motorists will make use of a temporary bridge or the existing bridge during construction. Pedestrian access along the canal berm will be maintained to facilitate canal inspection. The County will continue its coordination with EID prior to and during construction. Project construction activities would be coordinated with local law enforcement and emergency services providers.
- Less Than Significant Impact. The completed Project will not expose people or structures to a h) new or increased significant risk of loss, injury or death involving wildland fires. Project

construction activities would be coordinated with local law enforcement and emergency services providers.

4.2.9 Hydrology and Water Quality

IX. HYDROLOGY AND WATER QUALITY—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?			\boxtimes	
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?			\boxtimes	
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?			\boxtimes	
f) Otherwise substantially degrade water quality?				\boxtimes
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?			\boxtimes	
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?				\boxtimes

Environmental Setting

The Project is located in the in the South Fork American Hydrologic Unit (hydrologic unit code 18020129). The American River has been extensively dammed and diverted downstream of the Project area for hydroelectricity production as part of the Sacramento Municipal Utility District's (SMUD) Upper American River Project.

The Project includes the replacement of the existing bridge over the El Dorado Canal which is owned and operated by the El Dorado Irrigation District (EID). The Project has been designed to avoid affecting the El Dorado Canal. The Project site is not listed as occurring in a l00-year floodplain. According to the FEMA/FIRM index panel for El Dorado County the project site falls within non-printed community panel no. 06017C0575E in an area where flood hazards are undetermined but possible.

Potential Environmental Effects

a) Less Than Significant Impact. The bridge replacement will not violate water quality or waste discharge requirements. The Project will disturb less than one acre of soil and does not require a Section 402 NPDES permit. Implementation of BIO-2 and the revegetation measures and water quality BMPs in HYDRO-1will ensure long-term soil stabilization and protect water quality during construction.

Measure HYDRO-1

- Areas temporarily disturbed will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species in accordance with Appendix F of the Project NES MI. Reseeded areas will be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The project engineer will determine the specifications needed for erosion control fabric (e.g., shear strength) based on anticipated maximum flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species. No seed of nonnative species will be used unless certified to be sterile.
- Contract provisions will require implementation of best management practices (BMPs) consistent with the Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation.
- b) *No Impact.* The Project would not involve any withdrawals from an aquifer or groundwater table.
- c) Less Than Significant Impact. The Project is the replacement of an existing structure and will not alter the course of the El Dorado Canal and will not substantially change rate or amount of surface runoff present.
- d) Less Than Significant Impact. See response to item a) and c) above.
- e) Less Than Significant Impact. The Project would not provide additional sources of runoff compared with the existing bridge. The minor increase of impervious surface area resulting from construction of the approaches and wider bridge deck is not expected to contribute to a substantial increase in water runoff from the site.
- f) No Impact. No additional impacts other than those discussed above are anticipated.
- g) **No Impact.** The Project is a bridge replacement project, and no housing development is associated with the Project.
- h) **Less Than Significant Impact.** The Project site is not listed as occurring in a 100-year floodplain. According to the FEMA/FIRM index panel for El Dorado County the project site falls within non-printed community panel no. 06017C0575E in an area identified as Zone D where flood hazards are undetermined but possible.

i) **No Impact.** The Project will not expose people to higher levels of risk involving flooding. General Plan Policy 6.4.2.2 protects the life and property of County residents below dams by not allowing new critical or high occupancy structures (e.g., schools, hospitals) to be located within the inundation area resulting from failure of dams. The bridge is not a critical or high occupancy structure.

Potentially

No Impact. The Project is not in an area subject to seiche or tsunami. j)

4.2.10 Land Use and Planning

X. LAND USE AND PLANNING—Would the project:	Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes
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?				\boxtimes
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

Environmental Setting

The 2004 El Dorado County General Plan is the relevant land use plan for the project area. The General Plan designation of the parcel in the Project area is Natural Resources (NR, 1 DU per 40 ac below 3,000 ft elevation, 1 DU per 160 ac above 3,000 ft elevation) and the zoning designation is Timberland Preserve Zone (TPZ) (El Dorado County 2004b).

Potential Environmental Effects

- a) *No Impact.* The Project proposes to replace the existing bridge on substantially the same alignment and would not physically divide an established community.
- **No Impact.** The Project would not conflict with the goals, objectives or policies intended to b) mitigate environmental impacts adopted in the 2004 El Dorado County General Plan. Replacement of the existing bridge is identified as a needed improvement (project number 77125) in the El Dorado County Community Development Agency, Transportation Division's 2013 Adopted Capital Improvement Program (El Dorado County 2013).
- **No Impact.** The Project does not occur in an area covered by a habitat or natural community c) conservation plan. El Dorado County is currently preparing an Integrated Natural Resources Management Plan to identify important habitats in the County and establish a program for the management and preservation.

4.2.11 Mineral Resources

		Significant		
XI. MINERAL RESOURCES—Would the project:	Potentially Significant Impact	Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

Potentially

D . . . 11

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 resource. Other metallic minerals found in the county include silver, copper, nickel, chromite, zinc, tungsten, mercury, titanium, platinum, and iron. Nonmetallic mineral resources include building stone, limestone, slate, clay, marble, soapstone, sand, and gravel (El Dorado County 2004a). The Project area is not located in an area mapped as an 'Important Mineral Resource Area' (El Dorado County 2004b).

Potential Environmental Effects

- a) *No Impact*. The Project area is not located in an area mapped as an 'Important Mineral Resource Area' (El Dorado County 2004b). The Project would not impact the availability of mineral resources that are locally important or would be of value to the state.
- b) *No Impact.* See response to item a).

4.2.12 Noise

XII. NOISE—Would the project:	Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 ground-borne vibration or ground-borne noise levels?			\boxtimes	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				\boxtimes
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				\boxtimes

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?			

Environmental Setting

The July 2004 El Dorado County General Plan Public Health, Safety, and Noise Element establishes policies and standards for noise exposures at noise sensitive land uses. The relevant policies are listed below:

Policy 6.5.1.9 Noise created by new transportation noise sources, excluding airport expansion but including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 6-1 at existing noise-sensitive land uses.

Table 5 below includes Table 6-1 of the County General Plan.

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration.

- A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} caused by a new transportation noise source will be considered significant;
- B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} caused by a new transportation noise source will be considered significant; and
- C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise will be considered significant.

Table 5. Maximum allowable noise exposure for transportation noise sources (General Plan Table 6-1).

TABLE 6-1 MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES				
T and The	Outdoor Activity Areas	Interio	or Spaces	
Land Use	L _{dn} /CNEL, dB	L _{dn} /CNEL, dB	$\mathbf{L}_{\mathrm{eq}},\mathbf{dB}^{^{2}}$	
Residential	60 ³	45		
Transient Lodging	60 ³	45		
Hospitals, Nursing Homes	60 ³	45		
Theaters, Auditoriums, Music Halls			35	
Churches, Meeting Halls, Schools	60 ³		40	
Office Buildings			45	
Libraries, Museums			45	

Playgrounds, Neighborhood Parks	70	
NT - 4		

Notes:

In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

As determined for a typical worst-case hour during periods of use.

Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

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 night time construction activities are allowed if it can be shown that nighttime construction activities would alleviate traffic congestion and safety hazards. The significance of 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. Because the Project is not capacity increasing and 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.

Potential Environmental Effects

- a) (Construction Noise) Less Than Significant Impact. 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. These increases would be temporary. Daytime construction 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. Given that the Project contractor would adhere to applicable County constructionrelated noise standards, this impact considered less than significant.
 - (Operational Traffic Related Noise) No Impact. The Project does not increase the capacity of Hazel Valley Road. The post project noise levels in the Project vicinity will be substantially unchanged from the pre-project condition
- Less Than Significant Impact. Project construction includes activities, such as operation of large b) pieces of equipment (e.g., heavy trucks) which may result in the periodic, temporary generation of ground-borne vibration. Because the Project would not expand the roadway or change the way in which it is used, an increase in ground-borne vibration associated with use of the road would not change from the current condition. Given the nature of any potential ground-borne vibration and

- given that any impacts would be temporary and periodic, potential impacts are less than significant.
- c) *No Impact.* The Project is not traffic- or growth inducing and would not change the way in which the roadway is used. The Project would not contribute to a substantial permanent increase in the ambient noise level in the project vicinity.
- d) Less Than Significant Impact. Construction activities would increase noise levels temporarily in the vicinity of the Project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, weather, time of day, and other factors. However, these increases would be temporary. 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. Because the Project contractor would be required to comply with applicable County construction-related noise standards, this impact is considered less than significant.
- e) **No Impact.** The Project is not located within an airport land use plan area or within two miles of a public or public use airport.
- f) *No Impact*. The Project is not located within the vicinity of a private airstrip.

4.2.13 Population and Housing

XIII.POPULATION AND HOUSING—Would the project:	Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impa
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)?				\boxtimes
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

Environmental Setting

The Project is the replacement of an existing bridge and will not increase the capacity of the Hazel Valley Road.

Potential Environmental Effects

- a) **No Impact.**). The Project will not result in population growth, the displacement of existing any housing, or a need for new housing.
- b) *No Impact.* See response to item a).
- c) *No Impact.* See response to item a).

4.2.14 Public Services

XIV.	PUBLIC SERVICES—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact	
im alt alt co m	puld the project result in substantial adverse physical apacts associated with the provision of new or physically tered governmental facilities, need for new or physically tered governmental facilities, the construction of which build cause significant environmental impacts, in order to anntain acceptable service ratios, response times or other erformance objectives for any of the public services:					
	Fire protection?				\boxtimes	
	Police protection?				\boxtimes	
	Schools?				\boxtimes	
	Parks?				\boxtimes	
	Other public facilities?					
The I Dorac Rd., 1	conmental Setting El Dorado County Sheriff provides general pudo County Fire District's stations 17 and 18 lespectively in Pollock Pines provides fire pretains public facilities including the project are	ocated at 6 otection se	5430 Pony E rvices and e	xpress Trainmergency s	il and 5785 Sly Pa	
Poten	ntial Environmental Effects					
a)	No Impact. Replacement of the existing be No new or physically altered governmenta	_		-	presence in the are	ea.
	4.2.15 Recreation					
XV. F	RECREATION:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact	
an su	ould the project increase the use of existing neighborhood dregional parks or other recreational facilities such that bstantial physical deterioration of the facility would ocur or be accelerated?					

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

Environmental Setting

There are no designated recreation facilities within or adjacent to the proposed project area.

Potential Environmental Effects

- a) **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) *No Impact.* The proposed Project staging area is used by people to park their vehicles and access the banks of the canal to walk or run. The proposed Project staging area is not a designated recreation area or parking area. Other smaller pull out areas along Hazel Valley Road in the vicinity of the Project area provide similar parking and access opportunities. The Project does not include the construction of any recreational facilities and would not require the expansion of existing recreational facilities.

4.2.16 Transportation/Traffic

XVI. TRANSPORTATION/TRAFFIC—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impaci
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)?				\boxtimes
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				\boxtimes
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?				\boxtimes
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
e) Result in inadequate emergency access?			\boxtimes	
f) Result in inadequate parking capacity?				\boxtimes
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				\boxtimes

Environmental Setting

Hazel Valley Road in the Project area is an off-system two lane rural road in El Dorado County. The bridge has an average daily traffic count of less than 100 vehicles per day (El Dorado County 2014a). The Hazel Valley Road Bridge is primarily used by El Dorado Irrigation District (EID) service trucks and Sierra Pacific Industries (wood products).

Potential Environmental Effects

- a) *No Impact.* Replacement of the existing one lane bridge would not change the amount of traffic on Hazel Valley Road because it is not a new development or growth inducing project. The Project will not require a detour. Project construction activities would be coordinated with local law enforcement and emergency services providers.
- b) **No Impact.** The bridge replacement would not change the amount of traffic on Hazel Valley Road.
- c) **No Impact.** The Project would not result in a change in air traffic patterns.
- No Impact. The Project objectives include improving roadway safety and compliance with the d) American Association of Highway and Transportation Officials (AASHTO) guidelines and El Dorado County standards.
- Less than Significant. Hazel Valley Road will remain open during construction and motorists will e) make use of the existing bridge or a temporary bridge during construction. The Project will not require a detour. Project construction activities would be coordinated with local law enforcement and emergency services providers.
- **No Impact.** The Project would not result in an increase in demand for parking in the vicinity of f) the Project.
- *No Impact.* The Project is identified in the El Dorado County Capital Improvement Program g) (CIP) as project # 77125 (El Dorado County 2013). The CIP is coordinated with the Five-Year major review of the General Plan (including the Transportation and Circulation Element) and is also included in the annual General Plan review. The Transportation and Circulation Element address alternative transportation systems.

4.2.17 Utilities/ Service Systems

XVII. UTILITIES AND SERVICE SYSTEMS—Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
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?				

fron	e sufficient water supplies available to serve the project in existing entitlements and resources, or are new or anded entitlements needed?					
prov	It in a determination by the wastewater treatment vider which serves or may serve the project that it has quate capacity to serve the project's projected demand ddition to the provider's existing commitments?					
	erved by a landfill with sufficient permitted capacity to ommodate the project's solid waste disposal needs?					
g) Com regu	ply with federal, state, and local statutes and lations related to solid waste?					
Enviro	onmental Setting					
	es in the Project area include a private 2-inc ead or underground utilities were observed				he bridge. No c	other
Potent	ial Environmental Effects					
a)	<i>No Impact.</i> The Project would not product applicable wastewater treatment requirem		ıl wastewat	er and would	d not exceed the	;
b)	No Impact. The Project would not increase the demand on existing water or wastewater treatment facilities.					
c)	Less than Significant Impact. The Project drainage system within the project area. The existing system.	-		_		
d)	No Impact. The Project would not require	e water serv	rice.			
e)	No Impact. The Project would not produc	ce wastewat	ter.			
f)	No Impact. Solid waste generated by the including asphalt and concrete, generated of the proposed improvements. Solid was and local regulations. Disposal would occur not generate the need for new solid waste	by the exca ste disposal cur at permi facilities.	vation of exwould occu tted landfill	xisting road or in accordants. Therefor	way and constru ance with federa re, the Project w	l, state, ould
g)	No Impact. The Project would conform to	o all applica	ible state ar	nd federal so	olid waste regula	itions.
	4.2.18 Mandatory Findings of Significa	nnce				
XVIII.	MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant	Potentially Significant Unless Mitigation	Less Than Significant		
	o be filled out by Lead Agency if required)	Impact	Incorporated	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

 \boxtimes

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?		\boxtimes	

plant or animal community, reduce the number or restrict

- Potentially Significant Unless Mitigation Incorporated. Through the use of Best Management a) Practices and the mitigation measures noted previously, the Project will not degrade the quality of the environment.
- Less than Significant. The Project is consistent with the General Plan and would not result in b) individually limited but collectively significant impacts. Therefore, the project would not cause any additional environmental effects or significantly contribute to a cumulative impact.
- Less than Significant. The Project would not result in substantial direct or indirect adverse effects c)from noise, either during project construction or operation, nor would it result in impacts to air quality, water quality or utilities and public services. Therefore the Project would not cause substantial adverse effects on human beings.

5. Determination

5.1 Environmental Factors Potentially Affected

This Initial Study has determined that in the absence of mitigation the proposed Project could 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	Mineral Resources
Agricultural Resources	Noise
Air Quality	Population and Housing
✓ Biological Resources	Public Services
✓ Cultural Resources	Recreation
Geology and Soils	Transportation/Traffic
Greenhouse Gas Emissions	Utilities and Service Systems
✓ Hazards and Hazardous Materials	✓ Mandatory Findings of Significance
✓ Hydrology and Water Quality	None Identified
Land Use and Planning	
On the basis of this initial evaluation:	
I find that the proposed project COULD N NEGATIVE DECLARATION will be pre	IOT have a significant effect on the environment, and a epared.
not be a significant effect in this case beca	ould have a significant effect on the environment, there will use the project-specific mitigation measures described in A MITIGATED NEGATIVE DECLARATION will be
I find that the proposed project MAY have ENVIRONMENTAL IMPACT REPORT	e a significant effect on the environment, and an is required.
mitigated" impact on the environment, but earlier document pursuant to applicable le measures based on the earlier analysis as of	tially significant impact" or "potentially significant unless t at least one effect 1) has been adequately analyzed in an gal standards, and 2) has been addressed by mitigation described on attached sheets. An ENVIRONMENTAL analyze only the effects that remain to be addressed.
potentially significant effects (a) have bee DECLARATION pursuant to applicable s	a significant effect on the environment, because all n analyzed adequately in an earlier EIR or NEGATIVE tandards, and (b) have been avoided or mitigated pursuant to ATION, including revisions or mitigation measures that are ng further is required.
Signature:	Date:
Name and Title: Janet Postlewait, Principal	Planner March 2, 2015

Initial/Study/MND March 2015

6. Report Preparation and References

6.1 Report Preparation

El Dorado County Community Development Agency, Transportation Division—CEQA Lead Agency

Chandra Ghimire, P.E. Senior Civil Engineer

Monika Pedigo Associate Civil Engineer

Janet Postlewait Principal Planner

Sycamore Environmental Consultants, Inc.

Vice President, Principal In

Jeffery Little Charge, Consulting Planner,

Project Manager

Adam Forbes **Biologist**

Aramis Respall CAD/GIS Analyst

Tremaine & Associates, Inc.

Kim Tremaine, M.A., Ph.C., RPA Principal Investigator Trish Fernandez, M.A. Principal Investigator

6.2 References

- California Department of Conservation. August 2000. A general location guide for ultramafic rocks in California Areas more likely to contain naturally occurring asbestos. Division of Mines and Geology, open-file report 2000-19. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr 2000-019.pdf
- California Department of Conservation. Accessed October 2014 (2014a). 2010 Geologic Map of California. http://www.quake.ca.gov/gmaps/GMC/stategeologicmap.html.
- California Department of Conservation. Accessed October 2014 (2014b). CGS Seismic Hazard Zonation Program (SHZP) Data Access Page.
 - http://gmw.consrv.ca.gov/shmp/MapProcessor.asp?Action=SHMP&Location=All&Version=5&Browser=Netscape&P latform=Win
- California Department of Conservation. Accessed October 2014 (2014c). Farmland Mapping and Monitoring Program. El Dorado County important farmland. El Dorado, CA.
- California Department of Fish and Wildlife (CDFW). February 2010 (2010a). A status review of the fisher (Martes pennanti) in California. Report to the Fish and Game Commission.
- California Department of Fish and Wildlife (CDFW). September 2010 (2010b). Vegetation classification and mapping program: Natural Communities – List. Biogeographic Data Branch, Sacramento, CA.

- California Department of Fish and Wildlife (CDFW). September 2010. Vegetation classification and mapping program: Natural Communities List. Biogeographic Data Branch, Sacramento, CA.
- California Environmental Quality Act (CEQA) Statutes. 1970. Public Resources Code Section 21000, et seq.
- El Dorado County Air Quality Management District (AQMD). February 2002. Guide to air quality assessment, determining significance of air quality impacts under the California Environmental Quality Act.
- El Dorado County. 2005. El Dorado County Asbestos Review Areas Western Slope, County of El Dorado. El Dorado County Surveyor/G.I.S. Division, G.I.S. Project Id: 3089a.
- El Dorado County. January 2004, Certified 19 July 2004 (2004a). El Dorado County general plan, final environmental impact report (EIR). Resolution No. 234-2004, State Clearinghouse No. 2001082030. Prepared by EDAW.
- El Dorado County. Adopted 19 July 2004 (2004b). El Dorado County general plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief. El Dorado County Planning Department, Placerville, CA.
- El Dorado County, Community Development Agency, Transportation Division. 24 June 2013 (Accessed: October 2014). Adopted 2013 Capital Improvement Programs for: West Slope Road/Bridge, Capital Overlay and Rehabilitation, Environmental Improvement Program, Airports, Road Maintenance Program, National Pollutant Discharge Elimination System. Available: http://www.edcgov.us/Government/DOT/CIP.aspx. . .
- El Dorado County, Community Development Agency, Transportation Division. 21 July 2014 (2014a). Hazel Valley Rd/ EID Canal Bridge, Bridge No. 25C0092, Replacement vs Rehabilitation Report. Prepared by Monika Pedigo and David R. Friestad.
- Governor's Office of Planning and Research (OPR). 19 June 2008. Technical advisory: CEQA and climate change: Addressing climate change through California Environmental Quality Act (CEQA) Review. Sacramento, CA. http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf.
- Mead & Hunt, Inc. 17 February 2015. Historical Resources Evaluation Report, Hazel Valley Road Bridge (25C-0092) Project, Hazel Valley Road at EID Canal El Dorado County, California. Prepared for: El Dorado County Department of Transportation Project.
- Natural Resources Conservation Service (NRCS; formerly known as Soil Conservation Service). April 1974. Soil survey of El Dorado Area, California. USDA Soil Conservation Service.
- Sacramento Area Council of Governments. 2012. *Metropolitan Transportation Plan/Sustainable Communities Strategy 2035*. Available: http://www.sacog.org/2035/mtpscs/. Accessed: October 2014.
- Sycamore Environmental Consultants, Inc. May 2014. Natural Environment Study (Minimal Impacts), Hazel Valley Road at the El Dorado Canal Bridge (25C0092) Replacement, El Dorado County, CA.
- Taber Consultants. 14 January 2014. Draft Foundation Report, Hazel Valley Road/EID Canal Bridge Replacement. Prepared for: El Dorado County, Community Development Agency, Transportation Division
- Tremaine & Associates, Inc. November 2014. Archaeological Survey Report, Bridge No. 25C0092, Hazel Valley Road over El Dorado Canal Replacement Project.
- U.S. Environmental Protection Agency (EPA). Accessed September 2014. Overview of Greenhouse Gases. http://www.epa.gov/climatechange/ghgemissions/gases.html.

Appendix A:	Mitigation Monitoring and Reporting Plan
Initial Study/MND	Hazal Vallay Road at El Dorado Canal Bridge (25C0002) Penlacement Project

MITIGATION MONITORING AND REPORTING PLAN HAZEL VALLEY ROAD AT THE EL DORADO CANAL BRIDGE (25C0092) REPLACEMENT PROJECT

CEQA LEAD	AGENCY:
El Dorado	County

PREPARED: March 2015

ADOPTED BY BOARD OF SUPERVISORS ON:

Introduction

Purpose

The El Dorado County Community Development Agency, Transportation Division, (Transportation) intends to replace the existing Hazel Valley Road at the El Dorado Canal Bridge (25C0092) located in unincorporated El Dorado County. The Project is located along Havel Valley Road approximately 5 mi east of Pollock Pines.

As described in the IS/MND, the Project itself incorporates a number of measures to minimize adverse effects on the environment. The IS/MND also identified several mitigation measures that are required to reduce potentially significant impacts to levels that are less than significant. This Mitigation Monitoring and Reporting Plan (MMRP) describes a program for ensuring that these mitigation measures are implemented in conjunction with the Project. El Dorado County Transportation, as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the 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 will include conducting routine inspections and reporting activities, coordinating with the Project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken.

Regulatory Framework

California Public Resources Code Section 21081.6 and California Code of Regulations Title 14, Chapter 3, Section 15097 require public agencies to adopt mitigation monitoring or reporting plans when they approve projects under a MND. The reporting and monitoring plans must be adopted when a public agency makes its findings pursuant to CEQA so that the mitigation requirements can be made conditions of Project approval.

Format of This Plan

The MMRP summarizes the impacts and mitigation measures identified and described in the Project IS/MND. Each of the impacts discussed within this MMRP is numbered based on the sequence in which they are discussed in the IS/MND. A summary of each impact with the corresponding specific mitigation measures are provided. Mitigation measures are followed by an implementation description, the criteria used to determine the effectiveness of the mitigation, the timeframe for implementation, and the party responsible for monitoring the implementation of the measure.

Implementation of mitigation measures is ultimately the responsibility of Transportation; during construction, the delegated responsibility is shared by Transportation's contractors. Each mitigation measure in this plan contains a "Verified By" signature line, which will be signed by the Transportation Project manager when the measure has been fully implemented and no further actions or monitoring are necessary for the implementation or effectiveness of the measure.

Impacts and Associated Monitoring or Reporting Measures

IV. BIOLOGICAL RESOURCES

Impact (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.

Birds Of Prey and Migratory Bird Treaty Act

The Project area provides potential nesting habitat for birds of prey and birds listed by the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). BIO-1 will be implemented to avoid impacts to birds of prey and birds listed by the MBTA.

Measure BIO-1

Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from 1 February through 31 August.

Swallow

In California, bridge-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Measures should be taken to prevent establishment of cliff swallow nests prior to construction. Techniques to prevent nest establishment include using exclusion devices, removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation, or perform any combination of these. This can be done by:

- The contractor can visit the site weekly and remove partially completed nests using either hand tools or high pressure water; and/or
- Hang netting from the bridge before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.

Birds of Prey and Birds Protected by the Migratory Bird Treaty Act

- If construction begins outside the 1 February to 31 August breeding season, there will be no need to conduct a preconstruction survey for active nests.
- Trees scheduled for removal should be removed during the non-breeding season from 1 September to 31 January.
- If construction is scheduled to begin between 1 February and 31 August, a biologist shall conduct a survey for active bird of prey nests within 250 ft and active MTBA bird nests within 100 ft of the BSA from publicly accessible areas within one week prior to construction. The measures listed below shall be implemented based on the survey results.

No Active Nests Found:

• If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary.

Active Nests Found:

- If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities or an injured or killed bird is found, immediately:
 - 1. Stop all work within a 100-ft radius of the discovery.
 - 2. Notify the Engineer.
 - 3. Do not resume work within the 100-ft radius until authorized.
- The biologist shall establish a minimum 250-ft Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-ft ESA around the nest if the nest is of an MBTA bird other than a bird of prey.

Bird Species Protection Areas

Protected Bird Type	Size of Protection Area (ESA)
Bird of prey	250 ft no-disturbance buffer
MBTA protected bird (not bird of prey)	100 ft no-disturbance buffer

- Activity in the ESA will be restricted as follows:
 - 1. Do not enter the ESA unless authorized.
 - 2. *If the ESA is breached, immediately:*
 - a. Secure the area and stop all operations within 60 feet of the ESA boundary.
 - b. Notify the Engineer.
 - 3. If the ESA is damaged, County determines what efforts are necessary to remedy the damage and who performs the remedy.
- No construction activity will be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.
- The size of an ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. Reduction of ESA size depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific factors.
- Between 1 February and 31 August, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests

in the area to be affected. If an active nest is found, the above measures will be implemented.

• If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.

Implementation:	The County will implement the measures as described above.
Effectiveness	The County will prepare and keep on file documentation
Criteria:	verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction Phase (Potential Construction Phase)
Verified By:	Date:
	County Project Manager

Impact (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?

Waters of the U.S.

The seasonal wetland located adjacent to an outside the southern Project boundary will be avoided and no impacts are anticipated. Implementation of BIO-2 will further reduce potential impacts to the seasonal wetland located adjacent to an outside the southern Project boundary.

Measure BIO-2

- Temporary fencing will be installed between the construction limits and the seasonal wetland
- Signs will be posted on the fencing notifying the construction crew that the area beyond is an Environmentally Sensitive Area (ESA) and that no circumstances personnel or equipment pass beyond the fencing.
- Water-permeable erosion control measures will be installed along the temporary fence line to ensure that sediment does not migrate south of the fence.
- The temporary fencing and water-permeable erosion control measures will be in place prior to commencement of construction.

Implementation:	The County will implement the measures as described above.
Effectiveness	The County will prepare and keep on file documentation
Criteria:	verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction Phase (Potential Construction Phase)
Verified By:	Date:
	County Project Manager

V. CULTURAL RESOURCES

Impact (b): Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Previously Recorded Cultural Resource

One previously recorded cultural resource is located adjacent to the Project area. As a precautionary measure to ensure avoidance of the previously recorded archaeological resource the County will implement the measure below.

Measure CULT-1

• The County will install ESA fencing as shown in the Caltrans approved ESA Action Plan.

Implementation:	The County will implement the measures as described above.
Effectiveness	The County will prepare and keep on file documentation
Criteria:	verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction and Potential Construction Phases
Verified By:	Date:
	County Project Manager

VIII. HAZARDS AND HAZARDOUS MATERIALS

Impact (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?

Lead Based Paint and Asbestos Containing Material

The existing bridge paint system may contain lead and the concrete abutments could possibly include asbestos containing material (ACM). Implementation of HAZ-1 will reduce potential impacts to less than significant

Measure HAZ-1

- Contract provisions will require testing of the existing concrete abutments for asbestos containing material (ACM) and the existing paint system for and lead prior before bridge demolition and removal.
- Contract provisions will require the existing paint system be handled in accordance with Caltrans Standard Special Provisions for removal of lead paint (Provision 14-11.08, Disturbance of Existing Paint Systems on Bridges).
- Contract provisions will require ACM be handled in accordance with Caltrans Non-Standard Special Provisions for 14-11.11, Management of Asbestos Containing Materials.

Implementation:	The County will implement the measures as described above.
Effectiveness	The County will prepare and keep on file documentation
Criteria:	verifying the implementation of the above-referenced measures.
Timing:	Pre-Construction and Potential Construction Phases
Verified By:	Date:
	County Project Manager

IX. Hydrology and Water Quality

Impact (a): Violate any water quality standards or waste discharge requirements?

Soil Stabilization & Erosion Control

Implementation of BIO-2 and the revegetation measures and water quality BMPs in HYDRO-1will ensure long-term soil stabilization and protect water quality during construction.

Measure HYDRO-1

- Areas temporarily disturbed will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species in accordance with Appendix F of the Project NES MI. Reseeded areas will be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The project engineer will determine the specifications needed for erosion control fabric (e.g., shear strength) based on anticipated maximum flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species. No seed of nonnative species will be used unless certified to be sterile.
- Contract provisions will require implementation of best management practices (BMPs) consistent with the Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation.

• Implementation:	The County 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:	Construction Phases
Verified By:	Date:
	County Project Manager