EL DORADO COUNTY
COMMUNITY DEVELOPMENT AGENCY
TRANSPORTATION DIVISION

SILVER SPRINGS PARKWAY TO BASS LAKE ROAD (SOUTH SEGMENT)

DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

VOLUME I: CHAPTERS 1—7

STATE CLEARINGHOUSE NO. ***SCH# 1991122014***

LEAD AGENCY:
Community Development Agency
Transportation Division

PREPARED WITH ASSISTANCE FROM:
Benchmark Resources

NOVEMBER 2015

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CONTACT PERSON:
Ms. Janet Postlewait
2850 Fairlane Court
Placerville, CA 95667
Phone: (530) 621-5900
Email: janet.postlewait@edcgov.us

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ABBREVIATIONS AND ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ACM	asbestos-containing materials
amsl	above mean sea level
APN	Assessor's Parcel Numbers
APS	Alternative Planning Strategy
AQAP	Air Quality Attainment Plan
ATCM	Airborne Toxic Control Measure
BMPs	best management practices
CAA	federal Clean Air Act
CAAQS	California ambient air quality standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administrations
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CIP	Capital Improvement Program
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent
County	El Dorado County
CRLF	California red-legged frog
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control

EDCAQMD	El Dorado County Air Quality Management District
EDCTC	El Dorado County Transportation Commission
EDHCSD	El Dorado Hills Community Services District
EID	El Dorado Irrigation District
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
FCAAA	Federal Clean Air Act Amendments of 1990
FEMA	Federal Emergency Management Agency
FIP	Federal Implementation Plan
GHG	greenhouse gases
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
IBC	Important Biological Corridors
INRMP	Integrated Natural Resources Management Plan
ISA	International Society of Arboriculture
LOS	level of service
MCAB	Mountain Counties Air Basin
MMRP	Mitigation Monitoring and Reporting Plan
MMT	million metric tons
NAAQS	national ambient air quality standards
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOA	naturally occurring asbestos
NOP	Notice of Preparation
NO_x	oxides of nitrogen
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
OWMP	Oak Woodland Management Plan
PCAPCD	Placer County Air Pollution Control District
PCBs	polychlorinated biphenyls
PG&E	Pacific Gas and Electric Company
Phase 1 ESA	Phase 1 Environmental Site Assessment
PHF	peak hour factor
PM_{10}	particulate matter less than 10 microns in mean diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in mean diameter
ppm	parts per million
PRC	California Public Resource Code

Project	Silver Springs Parkway to Bass Lake Road (South Segment) Project
RCRA	Resource Conservation and Recovery Act
Regional Board	Sacramento Valley Regional Water Quality Control Board
RMP	Risk Management Plan
ROG	reactive organic gas
RTP	Regional Transportation Plan
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
Scoping Plan	Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
SEIR	Subsequent EIR
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SR	State Route
SRA	State Responsibility Areas
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
TPZ	tree protection zone
Transportation	El Dorado County Community Development Agency, Transportation Division
U.S. 50	U.S. Highway 50
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled
YSAQMD	Yolo-Solano Air Quality Management District

CHAPTER 1
INTRODUCTION AND SUMMARY

CHAPTER 1—INTRODUCTION AND SUMMARY

1.1 Introduction

The California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Sections 21000 et seq.) requires that discretionary decisions by public agencies be subject to environmental review. The purpose of an Environmental Impact Report (EIR) is to identify the significant effects of a proposed project on the environment, identify alternatives to the project, and indicate the manner in which those significant effects can be mitigated or avoided. When feasible, each public agency is required to avoid or reduce to the extent feasible the significant environmental impacts of projects it approves.

El Dorado County (County) proposes to construct the southern approximately 0.25-mile segment of a new road, named Silver Springs Parkway, that would connect Green Valley Road and Bass Lake Road. The improvements the County is reviewing in this EIR are identified in the 2013 El Dorado County Capital Improvement Program (CIP) (El Dorado County 2015) as "Silver Springs Parkway to Bass Lake Road (south segment)" (CIP Project #76108), referenced herein as the "Project." The Project is located as shown on Figure 1-1, "Project Location." The northern approximately 0.8-mile segment of Silver Springs Parkway, between the northern end of the proposed Project segment and Green Valley Road, was completed in 2014. The Project would involve:

- construction of an approximately 0.25-mile segment of two-lane divided road with a center median and turn pockets, bike lanes, and walkways;
- construction of a new intersection where Silver Springs Parkway would connect to Bass Lake Road;
- reconstruction of portions of Bass Lake Road south and east of the new intersection;
- improvements to driveways along the Project segment of Silver Springs Parkway;
- acquisition of property needed for the new and realigned road segments;
- utility relocations; and
- drainage improvements.

Chapter 2, "Project Description," of this EIR provides a detailed description of the Project.

The County is the CEQA lead agency for the Project, meaning that the County has the primary approval authority for the Project and is therefore the agency responsible for conducting environmental review in compliance with CEQA. In 1993, the County certified the 1992 *Final Environmental Impact Report Bass Lake Road Realignment SCH# 90021120* (1992 Bass Lake Road Realignment EIR) (El Dorado County 1992). The proposed project evaluated in the 1992 Bass Lake Road Realignment EIR envisioned construction of a new road along the alignment of what is now referred to as Silver Springs Parkway. The County Board of Supervisors certified the 1992 Bass Lake Road Realignment EIR and approved the project on April 6, 1993. The north segment of that project has been constructed and the County is currently preparing to construct the southern segment. Due to additional discretionary approvals required for right-of-

way acquisition and other considerations, the County decided to conduct additional environmental review and to prepare a Subsequent EIR (SEIR). The County has prepared this Draft SEIR for public and agency review and comment and will prepare and certify a Final SEIR before making additional discretionary decisions regarding the Project.

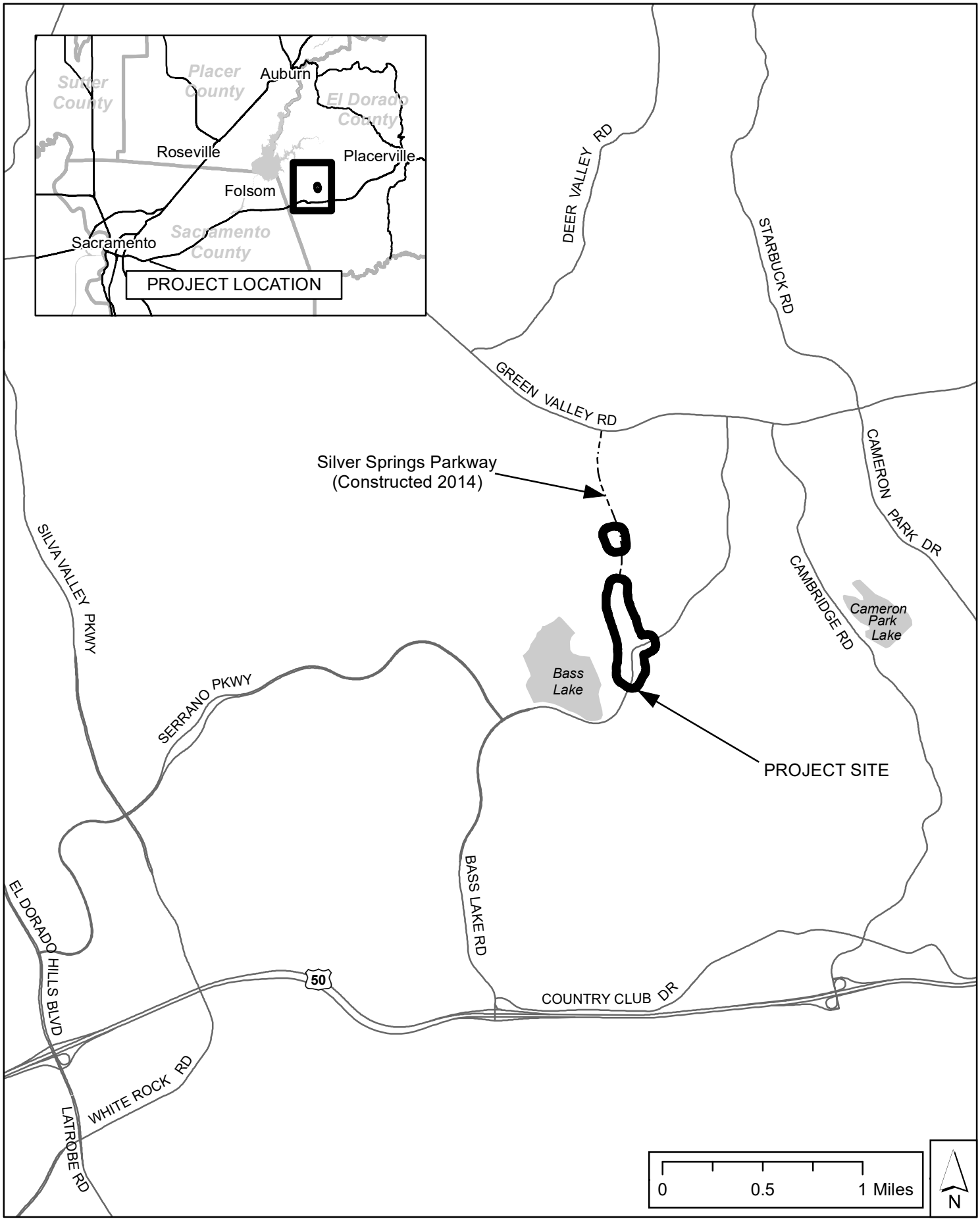
The El Dorado County Community Development Agency, Transportation Division (Transportation) is the County department responsible for managing the environmental review and documentation process. This document has been prepared pursuant to CEQA and the CEQA Guidelines (California Administrative Code Sections 15000 et seq.). Potential environmental effects of the Project that must be addressed include the significant adverse effects; growth-inducing effects; and significant cumulative effects of past, present, and reasonably anticipated future projects. This Draft SEIR incorporates and summarizes relevant analysis and information from the previously certified 1992 Bass Lake Road Realignment EIR and a 2001 addendum and includes updated and additional analysis to provide complete and comprehensive documentation of the Project's environmental impacts and other information required for CEQA compliance.

This Draft SEIR is available for public and agency review and comment during a 45-day period. The County will consider all comments received and will provide responses in the Final SEIR to all comments addressing environmental issues associated with the Project. The County will certify the Final SEIR and consider the information contained within the Final SEIR before making decisions necessary to proceed with the Project.

1.2 Project Background

In 1986, an alignment study was conducted to determine the future alignment, design, and improvements necessary to upgrade Bass Lake Road. In December 1986 and again in August 1987 the County Board of Supervisors held hearings to review the alignment study and to receive testimony regarding the alternatives. The County Board of Supervisors adopted the alignment and approved a Negative Declaration for the realignment project on September 22, 1987. In 1988, Benson and Sedar, a home building and development firm, purchased and submitted a tentative subdivision map (i.e., Bass Lake Subdivision) for the Dixon Ranch property located south of Green Valley Road. The County denied the Benson and Sedar proposal. However, County staff subsequently reconsidered the location of the previously adopted Bass Lake Road realignment and concluded that the alignment shown on the subdivision map proposed by Benson and Sedar was superior to the previously adopted realignment. As a component of pursuing the alternative alignment, the County prepared and certified the 1992 Bass Lake Road Realignment EIR on April 6, 1993.

In 1998, the County completed environmental review and approved the Silver Springs residential subdivision project. The Silver Springs subdivision project is adjacent to the northern portion of the Bass Lake Road realignment segment, and renamed the Bass Lake Road realignment to Silver Springs Parkway. Conditions of approval for the Silver Springs subdivision require the developer to construct the on-site portion (i.e., the northern segment) of Silver Springs Parkway and require the developer to partially fund construction of the south segment of Silver Springs Parkway, which is the Project evaluated in this Draft SEIR. The Silver Springs subdivision project is defined with three "units" of development.



SOURCE: Benchmark Resources 2015
BASE MAP: SACOG 2013

Figure 1-1. Project Location

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Unit 1 includes 53 single-family dwelling units, Unit II includes 134 single-family dwelling units, and Unit III includes 47 single-family dwelling units. Occupancy of Units II and III cannot occur until Silver Springs Parkway is completed between Bass Lake Road and Green Valley Road. Construction of the northern segment was completed in 2014.

Previously prepared environmental documents and approvals associated with the Bass Lake Road realignment and Silver Springs subdivision are listed in Table 1-1, "Previous Environmental Documents and Approvals."

Table 1-1. Previous Environmental Documents and Approvals

Document/Approval	Date
Bass Lake Road Realignment Study	1986
Board of Supervisors Hearings regarding Bass Lake Road Realignment Study	December 1986 August 1987
Bass Lake Road Realignment Draft EIR	February 1992
Bass Lake Road Realignment Final EIR	May 1992
El Dorado County Board of Supervisors certification of Final EIR and approval of Bass Lake Road Realignment Project	April 6, 1993
Silver Springs Subdivision Draft EIR	June 1998
Silver Springs Subdivision Final EIR	September 1998
Board of Supervisors certification of Silver Springs Subdivision Final EIR and approval of subdivision project	December 15, 1998
Addendum to Bass Lake Road Realignment EIR	January 23, 2001
Board of Supervisors approval of December 1, 2010, Silver Springs Subdivision EIR Addendum	March 8, 2011

1.3 Project Review and CEQA Process

1.3.1 Public and Agency Review of Draft SEIR

This Draft SEIR will be circulated and made available for public and agency review for a minimum period of 45 days and will be available for review at the following locations:

El Dorado Hills Branch Library
7455 Silva Valley Parkway
El Dorado Hills, CA 95762

Internet
http://www.edcgov.us/Government/DOT/CEQA.aspx

Transportation Placerville Office
2850 Fairlane Court, Building C
Placerville, CA 95667
Phone: (530) 621-5900

The public comment period will end no sooner than 45 calendar days from the filing of this Draft SEIR with the State Clearinghouse. The comment period end date will be identified in the Notice of Availability for this Draft SEIR. Written comments are to be sent to:

El Dorado County Transportation
Attn: Ms. Janet Postlewait
2850 Fairlane Court
Placerville, CA 95667
E-mail: janet.postlewait@edcgov.us

Written comments submitted via electronic mail must either be included in the body text of the e-mail message or as an attached file in Microsoft® Word or Adobe® PDF format. Please include the following phrase in the e-mail subject line: "Silver Springs Parkway SEIR." Copies of all written comments will be included in the Final SEIR and will become a part of the publicly accessible administrative record.

Following receipt of public comments on the Draft SEIR, the County will prepare a Final SEIR that includes all responses to comments and any necessary revisions to the text of the Final SEIR. The County must certify the Final SEIR prior to making additional discretionary decisions associated with the Project.

1.3.2 Public Involvement

Public input is an important aspect of the County's environmental review process. In accordance with CEQA Guidelines Section 15083, the County provides opportunities for individual members of the public as well as organization and agency representatives to consider proposed actions and provide input and recommendations concerning the content of an EIR. The County conducted scoping during preparation of this Draft SEIR and will provide additional opportunities for public input as discussed below.

1.3.2.1 Summary of SEIR Scoping

The County prepared and distributed a Notice of Preparation (NOP) on April 21, 2014. The NOP provided a summary of the Project, a map of the Project location, and an overview of the environmental review process. The NOP invited interested parties to provide comments during a 30-day period regarding the scope and content of issues to be addressed in the SEIR. A public notice advising of the NOP availability and advertising a public scoping meeting was mailed to individuals and organizations, including property owners and/or residents near the Project area. The NOP was also filed with the State Clearinghouse and posted on the County's website. A public notice announcing the NOP's availability and scoping meeting was posted in the *Mountain Democrat* newspaper and the *Folsom Telegraph* newspaper.

An SEIR scoping meeting was held at 5:30 p.m. on May 13, 2014, at the El Dorado County Public Library in El Dorado Hills, approximately 3.5 miles from the Project site. The scoping meeting included an introductory presentation by Transportation staff and the County's CEQA consultant and allowed attendees to provide comments, ask questions, and participate in discussions with Transportation staff about the Project and local transportation planning issues. The scoping meeting was attended by 15 individuals, in addition to County staff and consultants.

Appendix A, "SEIR Scoping Records," includes the SEIR NOP, the notice of completion filed with the State Clearinghouse, and agency and public scoping comments, including a summary of the May 13, 2014, scoping meeting.

1.3.2.2 Issues Raised During Scoping

Written comments regarding the scope of the environmental review received during the scoping period and a summary of oral comments provided at the May 14, 2014, scoping meeting are provided in Appendix A. The County has considered all comments received during preparation of this Draft SEIR.

1.3.3 Final SEIR Certification Process

The County will address comments and input received based on public and agency review of this Draft SEIR and provide responses to comments in a Final SEIR. Following completion of the Final SEIR, the County will certify the Final SEIR as complete, adopt CEQA findings for the Project, and, if necessary, adopt statements of overriding considerations for significant and unavoidable impacts of the Project. Certification of the Final SEIR does not represent a decision to proceed with the Project. Following certification of the Final SEIR, the County will consider proceeding with final design, right-of-way acquisition, permitting, and construction of the Project. In proceeding with the Project, the County will approve and implement a mitigation monitoring and reporting plan that includes any mitigation measures adopted in conjunction with the Project.

1.4 Summary of Impacts

CEQA requires that an EIR consider project impacts, cumulative impacts, and other effects, including growth and energy consumption. These impacts are evaluated in this Draft SEIR and summarized in this section.

1.4.1 Project Impacts

Table 1-2, "Summary of Impacts and Mitigation Measures," provides a summary of the impacts and mitigation measures identified in this Draft SEIR and identifies the impact significance without and with implementation of recommended mitigation.

1.4.2 Significant and Unavoidable Adverse Impacts

Section 2100(b)(2)(A) of CEQA requires that an EIR identify significant environmental effects that cannot be avoided if the project is implemented. As listed in Table 1-2, the Project would result in 20 potentially significant or significant impacts. All of these impacts would be reduced to less than significant through implementation of the recommended mitigation measures, and the Project would not result in any significant and unavoidable impacts.

1.4.3 Cumulative Impacts

CEQA requires that an EIR examine the cumulative impacts of a project. As discussed in CEQA Guidelines Section 15130(a)(1), a cumulative impact "consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." Chapter 4 provides an assessment of the Project's potential to result in

cumulatively considerable impacts when considered in light of the impacts identified through the County General Plan (El Dorado County 2004) CEQA review (additional discussion of this analysis approach is also included in Chapter 4). The analysis determined that none of the Project-specific impacts would create the potential for a substantial contribution to cumulative impacts.

1.4.4 Growth-Inducing Effects

Section 15126.2(d) of the CEQA Guidelines states that an EIR should discuss "the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth." The analysis determined that the Project would result in the removal of a barrier to future development within the Project vicinity. Growth-inducing effects are discussed in more detail in Section 4.4 of this Draft SEIR.

1.5 Alternatives

1.5.1 Summary of Alternatives Evaluation

CEQA Guidelines require that an EIR "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6[a]). The Guidelines also state that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (CEQA Guidelines Section 15126.6[b]). Chapter 5 of this Draft SEIR provides a discussion of the alternatives evaluation process.

For the purposes of the alternatives analysis in this Draft SEIR, it is recognized that environmental review of the construction of the Silver Springs Parkway along the proposed alignment has been previously conducted and consideration of alternatives was undertaken as part of those previous environmental reviews. Therefore, and given the Project objectives discussed in Chapter 2, the scope of the alternatives analysis does not extend to consideration of alternative alignments for the Project segment of Silver Springs Parkway. Instead, the consideration of alternatives is appropriately limited to modifications that could be made to the Project that would reduce significant and unavoidable impacts identified in Chapter 3 while still achieving the overall Project objective of constructing the Project along the previously approved alignment.

As discussed in Chapter 5, no Project modifications or alternatives were identified that would reduce the significant impacts of the Project. Thus, no feasible Project alternatives are considered available. The analysis also considers the No-Project Alternative as required by CEQA. The No-Project Alternative is a scenario in which the County would not proceed with development of the Project. The analysis concludes that the No-Project Alternative would 1) not achieve the Project objectives; 2) would not result in the adverse environmental effects identified in Chapters 3 and 4; and 3) would not result in the environmental benefits of the Project that

include reduced long-term air pollutant and GHG emissions, reduced traffic noise levels, and improved traffic circulation.

1.5.2 Environmentally Superior Alternative

CEQA Guidelines Section 15126 requires the lead agency to identify an environmentally superior alternative. The proposed Project and the No-Project Alternative are evaluated in this EIR. The No-Project Alternative would not result in the physical environmental impacts identified for the Project. However, the No-Project Alternative would not achieve the Project objectives. Additionally, the No-Project Alternative would not further the objectives of the County General Plan Circulation Element and other County transportation planning goals, nor would the No-Project Alternative satisfy the County's commitment under agreements with the Silver Springs residential development project developer for the completion of Silver Springs Parkway.

Pursuant to CEQA, if the environmentally superior alternative is the No-Project Alternative, then at least one of the other alternatives must be identified as the environmentally superior alternative.[1] However, because no other alternatives to the proposed Project have been identified by Transportation as feasible, no other alternatives are available to compare to the Project for environmental superiority.

[1] Specifically, CEQA Guidelines Section 15126.6(e)(2) states in relevant part, "If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

Table 1-2. Summary of Impacts and Mitigation Measures

Impact Summary	Significance without Mitigation	Mitigation Measure Summary	Significance with Mitigation
AESTHETICS			
Impact 3.2-1: Temporary degradation of visual character resulting from construction activities.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.2-2: Permanent alteration of existing visual character of the Project site as viewed from adjacent areas.	Potentially Significant	Mitigation Measure 3.2-2: The County shall prepare and implement a Project corridor landscaping plan within three years of Project construction.	Less than Significant
Impact 3.2-3: Light and glare from motor vehicles.	Less than Significant	No mitigation required.	Less than Significant
AIR QUALITY AND GREENHOUSE GASES			
Impact 3.3-1: Emissions of ozone precursors during construction.	Potentially Significant	Mitigation Measure 3.3-1. The County shall require that the construction contractor implement at least one of the three potential ozone precursor reduction measures as identified in the EDCAQMD *Guide to Air Quality Assessment*.	Less than Significant
Impact 3.3-2: Emissions of fugitive dust and particulate matter during construction.	Potentially Significant	Mitigation Measure 3.3-2. The County shall require that the construction contractor implement applicable best available fugitive dust control measures as specified in the EDCAQMD *Guide to Air Quality Assessment*.	Less than Significant
Impact 3.3-3: Emissions of diesel particulate matter during construction.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.3-4: Potential emissions of naturally occurring asbestos (NOA) during construction.	Potentially Significant	Mitigation Measure 3.3-4: Project construction activities shall comply with El Dorado AQMD Rules 223, 223-1, and 223-2.	Less than Significant
Impact 3.3-5: Operational motor vehicle ozone precursor emissions.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.3-6: Carbon monoxide concentrations at study area intersections.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.3-7: Short-term and long-term emissions of GHGs.	Less than Significant	Mitigation Measure 3.3-7. GHG emission reduction measures shall be implemented to the extent feasible during Project construction.	Less than Significant

Table 1-2. Summary of Impacts and Mitigation Measures

Impact Summary	Significance without Mitigation	Mitigation Measure Summary	Significance with Mitigation
BIOLOGICAL RESOURCES			
Impact 3.4-1: Loss of suitable habitat for potentially occurring special-status plant species.	Potentially Significant	Mitigation Measure 3.4-1: Preconstruction special-status plant species surveys shall be conducted and plants shall be avoided or transplanted and additional measures shall be implemented.	Less than Significant
Impact 3.4-2: Potential effects on Cosumnes spring stonefly.	Potentially Significant	Mitigation Measure 3.4-2: Preconstruction Cosumnes spring stonefly surveys shall be conducted and, if present, the species shall be relocated to suitable habitat.	Less than Significant
Impact 3.4-3: Potential effects on Valley elderberry longhorn beetle.	Potentially Significant	Mitigation Measure 3.4-3: Preconstruction elderberry shrub surveys shall be conducted and, if present, the avoidance, relocation, and/or other measures through consultation with the USFWS shall be implemented.	Less than Significant
Impact 3.4-4: Potential effects on coast horned lizard.	Potentially Significant	Mitigation Measure 3.4-4: Preconstruction coast horned lizard surveys shall be conducted and, if present, the species shall be relocated to suitable habitat.	Less than Significant
Impact 3.4-5: Potential effects on California red-legged frog and foothill yellow-legged frog.	Potentially Significant	Mitigation Measure 3.4-5: Consultation with USFWS and CDFW shall be initiated and preconstruction protocol surveys shall be conducted for CRLF and FYLF and, if present, additional consultation and impact avoidance measures shall be implemented prior to construction.	Less than Significant
Impact 3.4-6: Potential effects on western pond turtle.	Potentially Significant	Mitigation Measure 3.4-6: Preconstruction western pond turtle surveys shall be conducted and, if present, the species shall be relocated to suitable habitat.	Less than Significant
Impact 3.4-7: Potential effects on raptors and other migratory birds.	Potentially Significant	Mitigation Measure 3.4-7: Construction during the migratory bird nesting season shall be avoided or of buffer zones shall be established to prohibit construction activities in proximity to active nests.	Less than Significant
Impact 3.4-8: Potential effects on Western burrowing owl.	Potentially Significant	Mitigation Measure 3.4-8: Western burrowing owl surveys shall be conducted and impact avoidance measures shall be implemented in consultation with CDFW.	Less than Significant

Table 1-2. Summary of Impacts and Mitigation Measures

Impact Summary	Significance without Mitigation	Mitigation Measure Summary	Significance with Mitigation
Impact 3.4-9: Potential effects on special-status bat species.	Potentially Significant	Mitigation Measure 3.4-9: Special-status bat species surveys shall be conducted and impact avoidance measures shall be implemented.	Less than Significant
Impact 3.4-10: Potential effects on waters of the United States, waters of the state, and wetlands.	Significant	Mitigation Measure 3.4-10: The County shall conduct and obtain USACE verification of a wetlands delineation of the Project site and shall provide appropriate mitigation to offset the loss of wetlands and other waters of the United States associated with the Project.	Less than Significant
Impact 3.4-11: Potential effects on oak woodlands.	Significant	Mitigation Measure 3.4-11: The County shall minimize direct impacts and loss of oak woodlands and shall replace the loss of oak woodlands canopy on-site or off-site at a minimum ratio of 1:1.	Less than Significant
CULTURAL RESOURCES			
Impact 3.5-1: Disturbance or destruction of previously unidentified cultural resources and human remains during construction.	Potentially Significant	Mitigation Measures 3.5-1: The County shall incorporate cultural resources and human remains inadvertent discovery programs into construction contract documents.	Less than Significant
GEOLOGY AND SOILS			
Impact 3.6-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic events or landslides.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.6-2: Potential to result in substantial soil erosion or the loss of topsoil.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.6-3: Potential to be located on a geologic unit or soil that could become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and potential to be located on expansive soils that could create risk of damage.	Less than Significant	No mitigation required.	Less than Significant

Table 1-2. Summary of Impacts and Mitigation Measures

Impact Summary	Significance without Mitigation	Mitigation Measure Summary	Significance with Mitigation
HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.7-1: Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.7-2: Potential to 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.	Potentially Significant	Mitigation Measure 3.7-2: The County shall conduct a Phase 1 ESA of the Project study area and shall implement appropriate remediation to ensure worker and public safety in the event that hazardous materials or conditions are identified.	Less than Significant
Impact 3.7-3: Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.7-4: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.7-5: Potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires.	Potentially Significant	Mitigation Measure 3.7-5: Implement fire ignition prevention measures and an emergency fire response and notification plan during construction.	Less than Significant
HYDROLOGY AND WATER QUALITY			
Impact 3.8-1: Potential to violate a water quality standard or waste discharge requirement or otherwise provide a substantial additional source of polluted runoff.	Less than Significant	Mitigation Measure 3.8-1: The County shall prepare a Construction Stormwater Pollution Prevention Plan (SWPPP) for the Project that contains specific provisions for best management practices (BMPs) for reducing and controlling erosion from areas of excavation, fill, vegetation clearing and grading during and following Project construction.	Less than Significant

Table 1-2. Summary of Impacts and Mitigation Measures

Impact Summary	Significance without Mitigation	Mitigation Measure Summary	Significance with Mitigation
Impact 3.8-2: Potential to 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 preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).	Less than Significant	No mitigation required.	Less than Significant
Impact 3.8-3: Potential to substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation or flooding on- or off-site.	Less than Significant	Mitigation Measure 3.8-3: The County shall prepare a final drainage plan to support final Project design that contains specific recommendations for stormwater conveyance facilities.	Less than Significant
LAND USE AND PLANNING			
Impact 3.9-1: Consistency with General Plan policies.	Significant	Mitigation Measure 3.9-1: The County shall not advertise for construction bids for the Project until the County Board of Supervisors determines that oak tree removal can be undertaken in a manner consistent with the General Plan.	Less than Significant
Impact 3.9-2: Potential conflicts with existing and future land uses.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.9-3: Consistency with El Dorado County Board of Supervisors Resolution No. 29-2008.	Less than Significant	No mitigation required.	Less than Significant
NOISE			
Impact 3.10-1: Construction noise would cause short-term variations in the ambient noise environment during construction in proximity to existing residences.	Less than Significant	Mitigation Measure 3.10-1: The County shall require that construction contractors comply with all applicable local regulations regarding noise suppression and attenuation, that construction be limited to specific hours on Monday through Saturdays with no construction on Sunday's, and that engine-driven equipment be fitted with mufflers according to manufacturers' specifications.	Less than Significant

Table 1-2. Summary of Impacts and Mitigation Measures

Impact Summary	Significance without Mitigation	Mitigation Measure Summary	Significance with Mitigation
Impact 3.10-2: Increases in predicted traffic noise levels at adjacent sensitive receivers.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.10-3: Potential for excessive groundborne vibration from vehicle travel on Silver Springs Parkway.	Less than Significant	No mitigation required.	Less than Significant
TRAFFIC AND TRANSPORTATION			
Impact 3.11-1: Traffic operations under existing conditions with the Project.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.11-2: Traffic operations under future conditions with the Project.	Significant	Mitigation Measure 3.11-2: Signalization of the Deer Valley Road / Green Valley Road intersection shall be added to the County's Capital Improvement Program.	Less than Significant
Impact 3.11-3: Traffic congestion and delays resulting from construction activities and lane closures.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.11-4: Potential effects on bicycle and pedestrian circulation.	Less than Significant	No mitigation required.	Less than Significant
Impact 3.11-5: Potential effects on transit system operations.	Less than Significant	No mitigation required.	Less than Significant

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CHAPTER 2
PROJECT DESCRIPTION

CHAPTER 2—PROJECT DESCRIPTION

2.1 Introduction and Project Location

This chapter identifies the objectives and describes the proposed Silver Springs Parkway to Bass Lake Road (South Segment) Project (Project). The Project would extend Silver Springs Parkway as a two-lane road south from the southern terminus of the recently constructed northern segment of Silver Springs Parkway to Bass Lake Road. The Project would also realign Bass Lake Road from south of the Bass Lake Road/Madera Way intersection north to the new intersection that would be constructed at Bass Lake Road/Silver Springs Parkway. The Project includes installation of Class II bicycle lanes, concrete sidewalks on both sides of the parkway, and a center median with turn pockets for driveway access.

The Project is located in unincorporated El Dorado County between the communities of El Dorado Hills and Cameron Park, about 10 miles west of Placerville (see Figure 1-1, "Project Location"). The southern end of the Project segment is about 2.5 miles north of U.S. Highway 50 by way of Bass Lake Road, and the northern end of the segment is about 1 mile south of Green Valley Road. The alignment is generally located along an existing private road north from Bass Lake Road. The existing road is a gravel-surfaced one-lane road that intersects with Bass Lake Road and provides access to the driveways of two rural residential properties. The topography of the immediate area ranges from nearly flat to gently rolling grasslands and oak woodlands. Portions of the rights-of-way needed for the alignment are located within adjacent privately owned parcels.

2.2 Project Objectives

The construction of Silver Springs Parkway south to Bass Lake Road is required as a component of the Silver Springs subdivision to provide for a new connection between Bass Lake Road and Green Valley Road. Under the conditions of approval for the Silver Springs subdivision, the Silver Springs subdivision project developer was required to construct the northern segment of Silver Springs Parkway. Construction of the northern segment was completed in 2014. The developer was also conditioned by the County to construct the remaining southern segment of Silver Springs Parkway from Bass Lake Road, north to the connection with the southern end of the northern segment of Silver Springs Parkway.[1]

The Project is included in the 2015 El Dorado County Capital Improvement Program (CIP), CIP project number 76108, and is described in the CIP as follows (El Dorado County 2015):

> Realign Bass Lake Road south of Green Valley Road through the proposed Silver Springs Subdivision, which is west of the existing Bass Lake Road. The new road is named Silver Springs Parkway. The Silver Springs Subdivision is responsible

[1] Off-site Road Improvement Agreement #12-53452 between the Developer and the County defines specific responsibilities for funding and construction of the off-site portion of Silver Springs Parkway. Conditions of approval for the Silver Springs Subdivision are documented in Conditions of Approval TM 97-1330.

for building Silver Springs Parkway through the Subdivision. Silver Springs Parkway will be a two-lane standard divided roadway with shoulders.

The Circulation Element Map of the County General Plan Circulation Map (El Dorado County 2004 Figure TC-1) identifies Silver Springs Parkway between Bass Lake Road and Green Valley Road as a future two-lane major road. The new connection between Bass Lake Road and Green Valley Road would provide for improved and additional connectivity between Green Valley Road in the north and Bass Lake Road (which connects to U.S. Highway 50) to the south. The Project would also provide continuous pedestrian and bicycle facilities between Bass Lake Road and Green Valley Road, where no such facilities are presently available.

County objectives for the Project include:

1. Implement roadway/circulation improvements identified in the Circulation Element of the County General Plan (El Dorado County 2004), as amended.
2. Improve traffic circulation within western El Dorado County by providing improvements along a north-south connection between the existing Bass Lake Road and Green Valley Road.
3. Provide intersection improvements at any new or modified intersections as necessary for safe and efficient motor vehicle, bicycle, and pedestrian movements.
4. Install bicycle and pedestrian facilities along a north-south connection between the existing Bass Lake Road and Green Valley Road to interconnect community areas and to connect the existing Pleasant Grove Middle School and the future El Dorado Union High School with existing and developing residential communities.
5. Satisfy agreements between the County and developer by constructing the roadway improvements required as conditions of approval for the Silver Springs subdivision project.
6. Minimize environmental and social impacts through project design and mitigation while achieving the other Project objectives.

2.3 Project Description

This section describes the proposed roadway design, intersection traffic control and operations, bicycle and pedestrian facilities, construction activities, and other aspects of the Project. At the time of preparation of this Draft Subsequent Environmental Impact Report (Draft SEIR), the Project design drawings are in draft form. During final design, certain aspects of the Project may be modified or refined. Although not anticipated, if such refinements represent a substantial change to the Project that would result in one or more new impacts or a substantial increase in the severity of one or more impacts identified in this Draft SEIR, the County would consider whether additional environmental documentation is needed. However, refinements during final design that do not represent a substantial change to the Project would not require additional environmental review or documentation. Such refinements could include, but would not necessarily be limited to, minor changes in the disturbance area footprint, changes in grading or road elevations, specific areas of rights-of-way acquisition, and adjustments to planned utility improvements or replacements. Permitting and/or mitigation may be adjusted according to such refinements without affecting the overall analysis or conclusions in this Draft SEIR.

2.3.1 Project Design

The Project area and outer boundary of areas that would be disturbed during Project construction is shown on Figure 2-1, "Project Site." Figure 2-2, "Project Configuration," illustrates the primary elements of the Project. Appendix B, "Proposed Project Design Drawings and Right-of-Way Exhibits," provides the set of design plans for proposed road and utility improvements and right-of-way exhibits for the Project.

The Project would extend Silver Springs Parkway as a two-lane road south between the southern terminus of the recently constructed northern segment of Silver Springs Parkway and Bass Lake Road. The Project would also realign Bass Lake Road from south of the Bass Lake Road/Madera Way intersection north to the new intersection that would be constructed at Bass Lake Road/Silver Springs Parkway. The Project includes installation of Class II bicycle lanes, concrete sidewalks on both sides of the parkway, and a center median with turn pockets for driveway access. The Project would include reconstructing the existing intersection of Bass Lake Road and Sandhurst Hill Road to become a new four-way intersection with Bass Lake Road forming the east and south legs, Silver Springs Parkway forming the north leg, and a western leg that would terminate immediately west of the intersection where access would be provided to an existing private driveway.

The Project segment of Silver Springs Parkway would be approximately 1,400 feet long, and the reconstructed segments of Bass Lake Road south and east of the new intersections would be approximately 800 and 500 feet long, respectively. Silver Springs Parkway would be constructed within a right-of-way approximately 100 feet wide and would include a 16-foot center median, two 14-foot vehicle lanes (one in each direction), and shoulders/Class II bicycle lanes (including drainage gutter) 6 feet wide on each side of the roadway. Concrete sidewalks would be installed along both sides of the road consisting of a 6-foot sidewalk adjacent and parallel to the eastern side of the road and an 8-foot meandering sidewalk on the west side. The sidewalks would connect in the north with sidewalks along the northern segment of Silver Springs Parkway and, in the south, would terminate on Bass Lake Road south and east of the Silver Springs Parkway intersection. Accessibility ramps would be installed at each corner of the intersection.

Storm drain facilities would be installed within the Project site to collect stormwater from the paved surfaces and other areas disturbed/modified within the right-of-way (e.g., cut slopes and fill slopes). These facilities would direct stormwater runoff from paved and unpaved adjacent areas to a proposed stormwater trunk line and ultimately to existing drainage systems. Facilities would consist of a pipe network within the roadway right-of-way and drainage easements. Concrete-lined ditches, unlined ditches, and the street curb section have been designed to convey the flows to the drain inlets based on the drainage study prepared for the Project. Each drain inlet is sized and spaced to accommodate 10-year design flow, and the pipe and manhole system is designed to contain the 10-year design flow. Conveyance ditches along the roadway are sized to accommodate flows that would be received from the adjacent properties (Stantec 2008).

2.3.2 Landscaping and Lighting

Areas of temporary disturbance along the Project segment of Silver Springs Parkway resulting in exposed soils that could be subject to wind or water erosion would be seeded with a grass mix to provide soil stability and erosion control. These areas include portions of the center median and roadside areas adjacent to the proposed sidewalks. The County would make these areas available to the El Dorado Hills Community Services District for possible future installation and maintenance of landscaping and/or street lighting, but landscaping and street lighting would not be installed in these areas as a component of the Project. Project construction would require the removal of some of the existing landscaping and irrigation lines adjacent to the east and south sides of Bass Lake Road within the Project area and within the existing County right-of-way, including a portion of the existing landscaping between northbound Bass Lake Road and the soundwall/fence on the east side of Bass Lake Road north of Madera Way. Areas of temporary disturbance where landscaping currently exists would be restored with landscaping similar to that existing prior to construction to the extent feasible.

2.3.3 Preconstruction and Construction Activities

2.3.3.1 Rights-of-Way Acquisition

The Project would require that the County acquire a total of approximately 9 acres of temporary and permanent rights-of-way from portions of properties identified on Figure 2-3, "Project Area Properties and Assessor's Parcel Numbers" as Assessor's Parcel Numbers (APN) 115-030-04-100, 115-030-03-100, and 115-030-15-100. (Also see right-of-way exhibits in Appendix B.) Approximately 1.5 acres of permanent slope and drainage easement would be needed from portions of APNs 115-030-04-100, 115-030-03-100, and 115-030-15-100. Approximately 2.5 acres of temporary construction easements would also be required (in addition to permanent rights-of-way acquisition) from APNs 115-030-04-100, 115-030-03-100, 115-030-15-100, 115-031-021 and the County and Silver Springs, LLC (assuming use of all three potential construction staging areas). Figure 2-4, "Temporary and Permanent Rights-of-Way Requirements," shows areas of permanent rights-of-way acquisition and temporary construction and slope and drainage easements necessary for the Project. Acquisition could include negotiated payment, condemnation through eminent domain, and/or dedication in fee or easement. The County would also acquire (in fee right-of-way) approximately 400 square feet of a portion of the existing El Dorado Hills Community Service District property (APN 115-031-021) located northeast of the proposed Bass Lake Road/Silver Springs Parkway intersection.

2.3.3.2 General Construction Provisions

The County would retain a contractor to construct the proposed improvements, and the contractor would be responsible for complying with all applicable rules, regulations, and ordinances associated with construction activities and for implementation of any construction-related mitigation measures adopted for the Project. The County would provide construction contractor oversight and management and would be responsible for verifying the successful implementation of any applicable mitigation measures through the Project's Mitigation Monitoring and Reporting Plan (MMRP).

SOURCE: Benchmark Resources 2015
BASE MAP: ESRI 2015

Figure 2-1. Project Site

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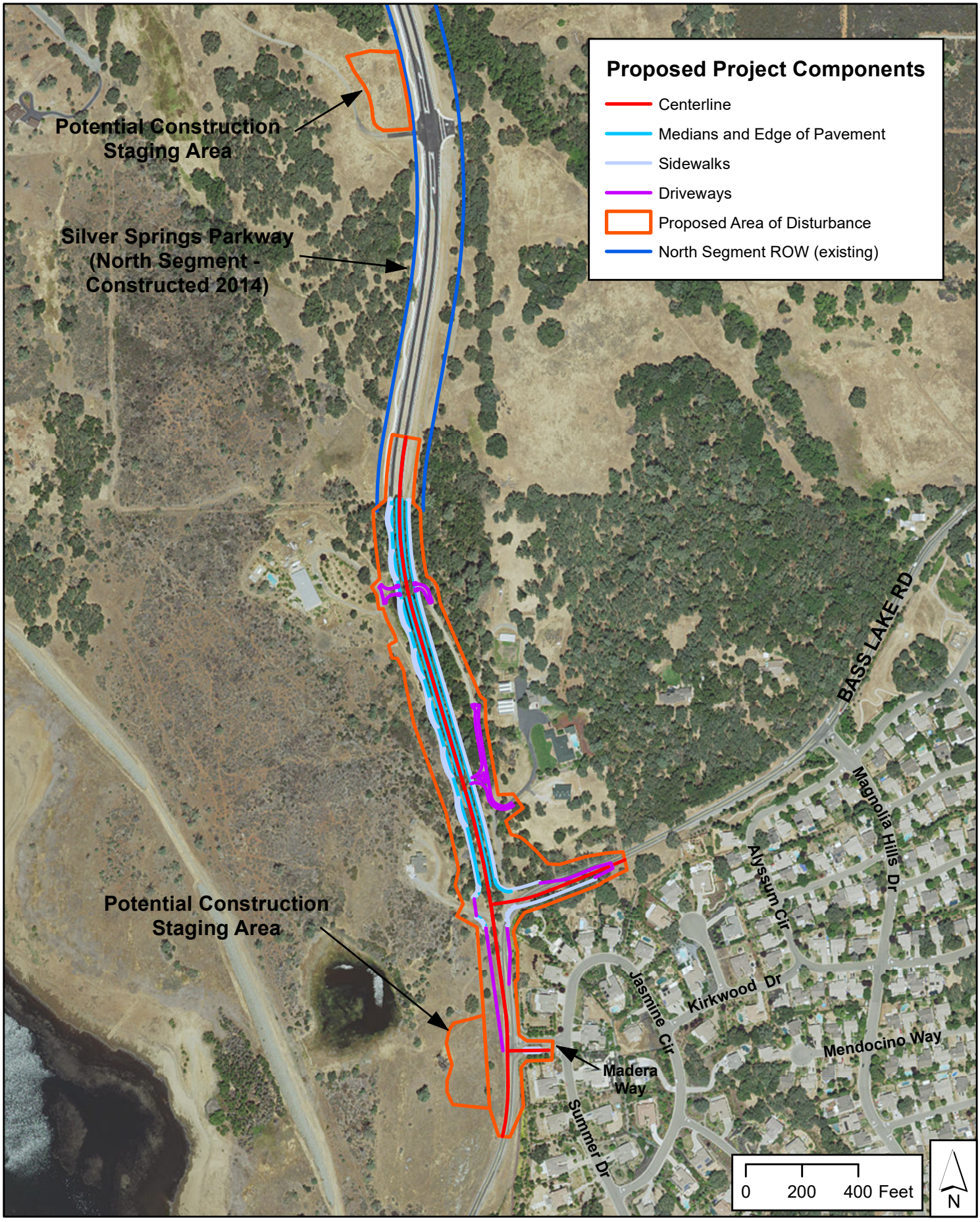

SOURCE: Benchmark Resources 2015
BASE MAP: ESRI 2015

Figure 2-2. Project Configuration

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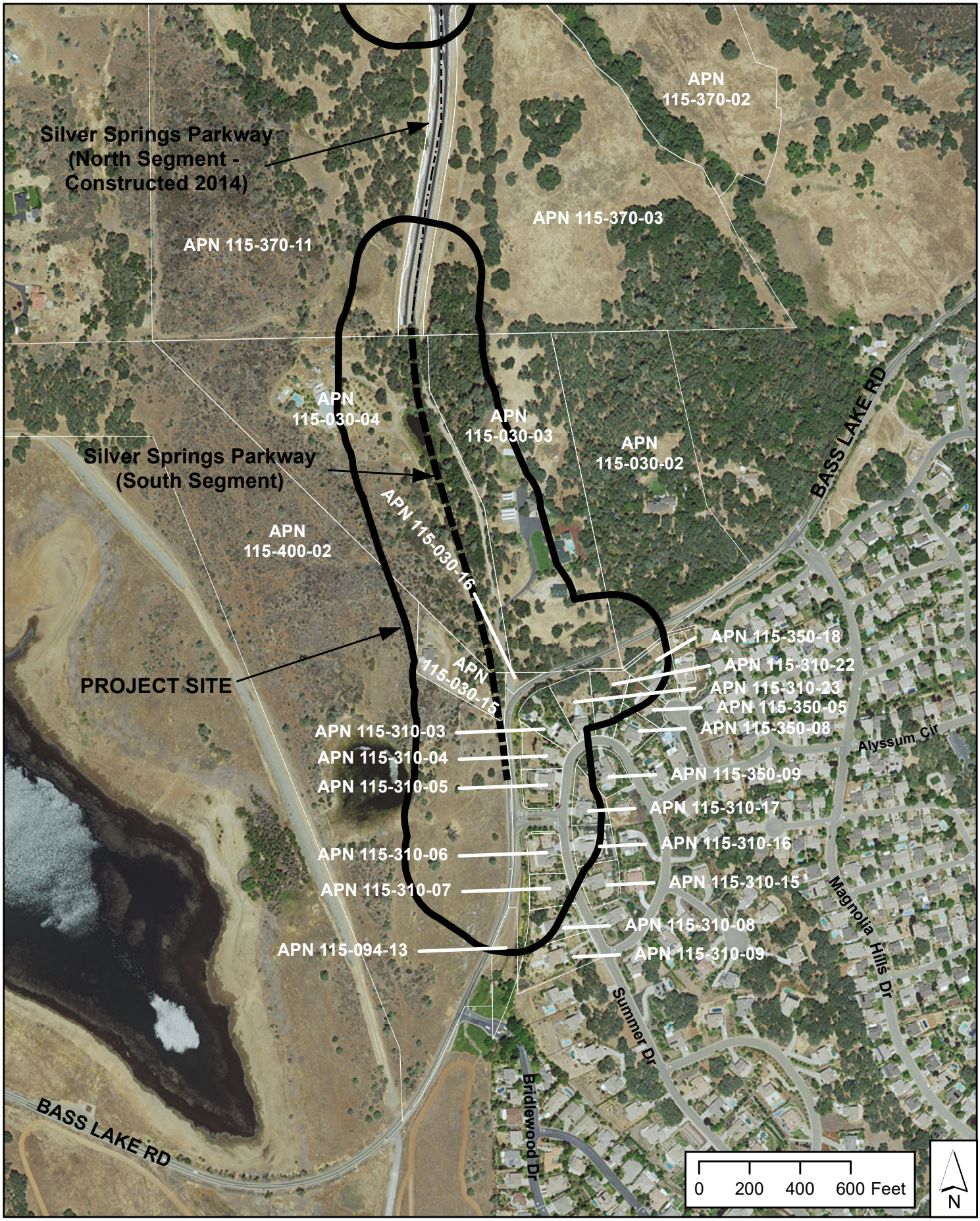

SOURCE: Benchmark Resources 2015
BASE MAP: ESRI 2015; El Dorado County 2015

Figure 2-3. Project Area Properties and Assessor's Parcel Numbers

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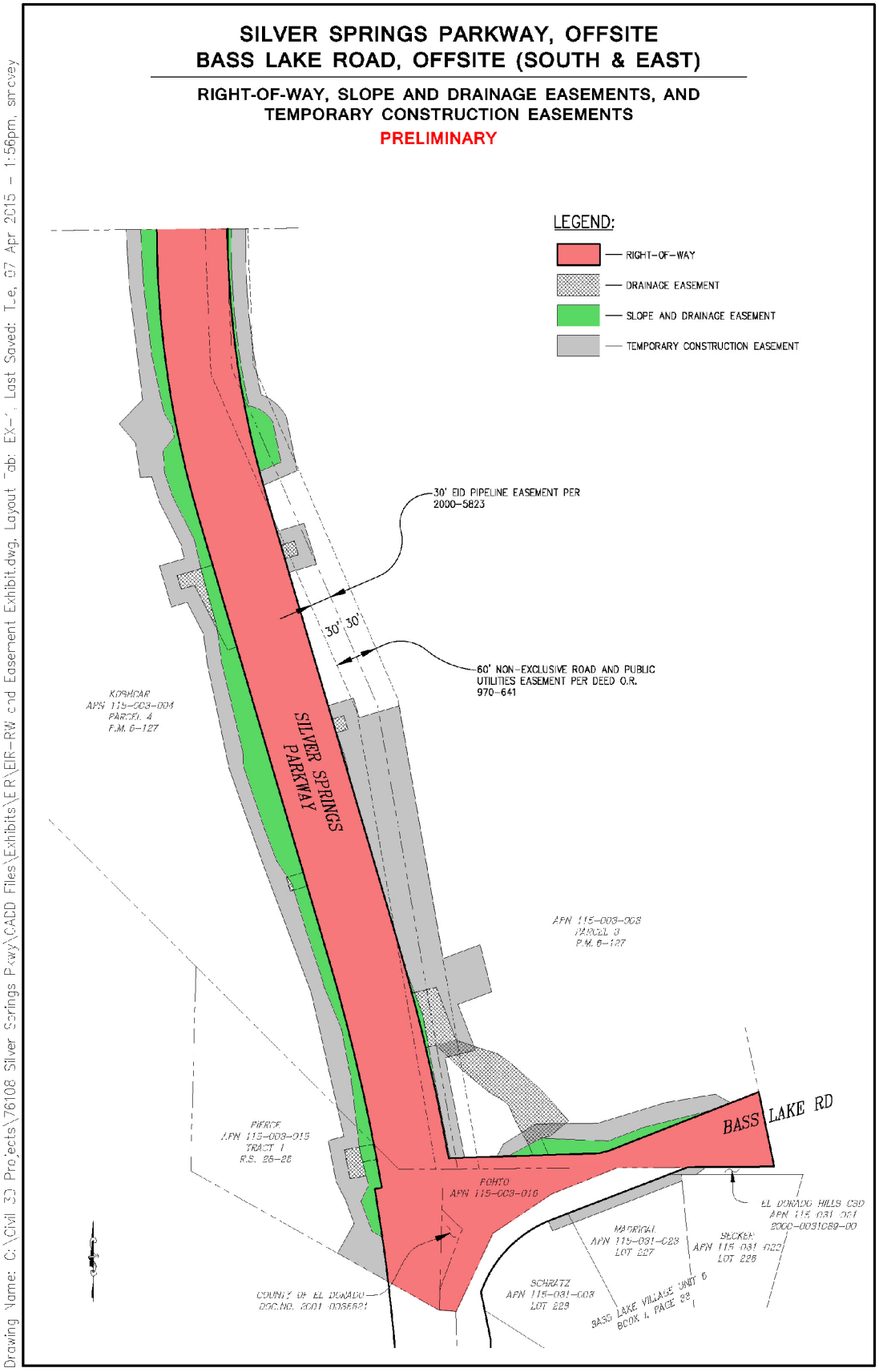

SOURCE: TLA 2015

Figure 2-4. Temporary and Permanent Rights-of-Way Requirements

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The Project would be constructed in accordance with the Public Contracts Code of the State of California; the California Department of Transportation *Standard Plans* and *Standard Specifications*; the *County of El Dorado Design and Improvements Standards Manual*; and the *Contract, Project Plans, and Project Special Provisions* under development by the County Division of Transportation.

The following are a combination of standard and Project-specific procedures and requirements applicable to construction:

1. Contract special provisions require that a traffic management plan be prepared. The traffic management plan will require construction staging, traffic control measures and provisions for bicycle and pedestrian access and crossings to be implemented during construction phases of the Project to maintain and minimize impacts to traffic circulation and bicyclist and pedestrian safety during construction. Minor traffic stoppages or delays may be allowed if necessary during Project construction to provide public safety. In the event that full roadway closures are necessary during project construction, provisions for private property access, utility easements, and emergency vehicle movement through the Project area will be provided at all times during construction.[2]
2. Contract special provisions will require compliance with El Dorado County Air Quality Management District (EDCAQMD) Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos.
3. Contract special provisions will require compliance with the California Air Resources Board Airborne Toxic Control Measure [ATCM] at Title 17 Section 93105 addressing construction, grading, quarrying, and surface mining activities and with the Asbestos ATCM for Surfacing Applications (Title 17 of the California Code of Regulations, Section 93106).
4. Contract provisions will require notification of the County and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.94 et seq., regarding the discovery and disturbance of human remains should any human remains be discovered during project construction.
5. Contract provisions will require compliance with the El Dorado County Grading, Erosion, and Sediment Control Ordinance (Chapter 15.14) and *Storm Water Management Plan* for Western El Dorado County and implementation of best management practices that will be identified in the Construction Storm Water Pollution Prevention Plan (SWPPP) that will be prepared for the Project.
6. The County 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.
7. The County and its construction contractors will comply with the *State of California Standard Specifications* written by the State of California Department of Transportation, for public service provision.

[2] Pursuant to Agreement 12-53452, a Traffic Control Plan is to be prepared by the developer and the plan shall address access to adjacent properties and the safe and convenient passage of public traffic through the work area. Road closure not be permitted, and two (2) lanes of traffic must be open at the end of each working day. The Traffic Control Plan shall include proposed flagging, signage, protective barriers and limits on excavation within four (4) feet of travel ways open to traffic. These traffic control measures will be implemented during Project construction.

8. Access to adjacent residential properties will be made available at all times during the construction period.
9. The Project will comply with County General Plan Policy 6.5.1.11 pertaining to construction noise standards.

2.3.3.3 Construction Sequencing

This section provides a general discussion of the steps and sequencing necessary to construct the Project following approvals and rights-of-way and easement acquisition.

2.3.3.3.1 Avoidance Fencing

If environmentally or culturally sensitive areas are identified for avoidance during construction, initial construction activities would include the installation of temporary fencing (typically an orange or other brightly colored plastic mesh material) around environmentally or culturally sensitive areas to prohibit construction activities within such areas.

2.3.3.3.2 Traffic Control

Construction would require traffic controls to ensure safe and efficient movement of vehicles and bicyclists and pedestrians along Bass Lake Road through the Project area and along Sandhurst Hill Road to the properties along the existing Sandhurst Hill Road. If necessary to manage two-way traffic during construction, a temporary traffic signal and/or flagpersons may be used. As noted above, contract special provisions would require that a traffic management plan be prepared. The traffic management plan will require construction staging, traffic control measures, and provisions for bicycle and pedestrian access and crossings to be implemented during construction phases of the Project to maintain and minimize impacts to traffic circulation and bicyclist and pedestrian safety during construction. Minor traffic stoppages or delays may be allowed if necessary during Project construction to provide public safety. If full roadway closures are necessary during project construction, provisions for private property access, utility easements, and emergency vehicle movement through the project area would be provided at all times during construction.

2.3.3.3.3 Staging Areas

Construction activities would require the establishment of one or more temporary staging areas for vehicle, equipment, and materials storage and for other construction-related activities. Although the final location of the temporary staging areas would be determined as a component of the construction contract, it is anticipated that temporary construction staging areas could be established at one or more of the three potential construction staging area locations shown on Figure 2-1.

2.3.3.3.4 Clearing and Grading

Removal of vegetation would be necessary in areas to be used for construction equipment operation, temporary construction activities, and preparation of the roadbed and adjacent areas to be graded. Typical methods and equipment would be required for the road work, including scrapers, excavators, dump/haul trucks, and other heavy equipment and vehicles. Trees would be removed by dropping them with chainsaws and cutting them to transportable

sizes. All vegetation and materials debris would be removed from the Project area and disposed of at approved locations.

Table 2-1, "Construction Disturbance and Excavation Quantities," summarizes approximate temporary and permanent disturbance acreages and excavation quantities. The total area of disturbance required for construction would be approximately 13.5 acres (including approximately 11.6 acres associated with construction of the roadway and related features and 1.9 acres of potential temporary construction staging areas). This includes disturbance that would be necessary for reconfiguring, resurfacing, or otherwise disturbing areas of existing paved surface along Bass Lake Road. Of the total disturbance, approximately 5.3 acres is considered *permanent* and would be paved with either asphalt (road surface) or concrete (sidewalks and drainage ditches). Approximately 8.2 acres of the construction disturbance would be *temporary* and would be either dedicated as landscape areas or would be seeded and vegetated with appropriate grass and forb species to promote revegetation after work is completed. Soils excavation (cut) and fill would be necessary during construction at various locations. An estimated 26,000 cubic yards (net) of imported fill material would be required for the Project and would be obtained from off-site sources.

Table 2-1. Construction Disturbance and Excavation Quantities

Disturbance/Excavation	Area/Volume
Total Disturbance	13.5 acres
Permanent Disturbance	*5.3 acres*
Temporary Disturbance (including three potential construction staging areas)	*8.2*
Ground Cut	1,000 cubic yards
Ground Fill	27,000 cubic yards
Net Imported Fill	26,000 cubic yards

Source: TLA 2015

2.3.3.3.5 Dewatering and Drainage

An approximately 0.8-acre seasonal pond is located in the northern portion of the Project site. As documented in the 1992 EIR (El Dorado County 1992), the pond was created by construction of a 10-foot high, compacted-earth dam across a seasonal drainage. Project construction would include dewatering this pond, removing the dam, and filling the pond basin with soils to contour the area as necessary for construction of the Project. A subdrain in the roadway structural section may be necessary to control subsurface water flow associated with this ponded area. Additional subdrains could be necessary where fill is placed over existing drainage swales, and where cut slopes intercept seepage zones.

2.3.3.3.6 Construction Stormwater Runoff Control

Clearing and grading would result in an increased exposure of soils and increased erosion/sedimentation potential during periods of rainfall. Additionally, equipment and materials present within the Project area during construction would create a potential for

petroleum or other products to be introduced to stormwater and conveyed to off-site areas. To minimize erosion and foreign materials transport in stormwater during construction, the County's contractor would prepare and adhere to the requirements of a Project-specific Construction Stormwater Pollution Prevention Plan (SWPPP) for County approval and filing with the Central Valley Regional Water Quality Control Board (Regional Board). The SWPPP would identify best management practices (BMPs) to be implemented to prevent pollutants and potential erosion, generated from the construction area, from draining to water courses and off site areas..

2.3.3.3.7 Utilities

Existing utilities within the Project area include AT&T, Pacific Gas and Electric Company (PG&E), Comcast, and El Dorado Irrigation District (EID). Project construction would require the relocation/modification of certain AT&T, PG&E, Comcast, and EID infrastructure, including removal and/or relocation of light and utility poles, a buried telephone line, a concrete utility pad, and an equipment cabinet and an adjustment of an existing water box to final road grade. As a component of final design, a determination would be made by the County regarding whether existing aboveground utilities within the Project site would be replaced underground within the Project right-of-way. However, it has not been determined at this time whether electric utility lines within the Project site would be relocated underground during Project construction. The Project would vertically relocate (deepen) an approximately 320-foot segment of a 6-inch sewer force main to provide for final grade requirements of the Project. All utility relocations/modifications would be done through coordination with the individual utility companies by both the County Community Development Agency, Transportation Division, and the construction contractor prior to construction.

2.3.3.3.8 Surfacing

Following grading and trench compaction of underground utility and storm drain installation, asphalt dikes, concrete curbs, and gutters would be installed and the road base would be prepared through placement and compaction of soils and gravel. Ready-mixed concrete and asphaltic concrete would be obtained through local suppliers and would be trucked to the site ready for pouring and paving. The prepared roadbed would be overlain with asphaltic concrete and the new surface would be striped to indicate motor vehicle and bicycle lanes. Signage (e.g., speed limit posting, bicycle lane identification, traffic controls) would be installed.

2.4 Preliminary Construction Schedule

Table 2-2, "Preliminary Project Construction Schedule," provides a preliminary schedule for completing design, property acquisition, permitting, and construction of the Project. The active construction period is estimated to require approximately 9 months. The schedule may be accelerated or extended as compared to that shown below. Construction activities would generally occur on non-holiday weekdays between 7 a.m. and 7 p.m. and on Saturdays between 9 a.m. and 5 p.m. Nighttime construction activities could occur if deemed necessary for public safety reasons.

Table 2-2. Preliminary Project Construction Schedule		
Activity	**Estimated Start**	**Estimated Completion**
CEQA Review	Ongoing	November 2015
Final Design	November 2015	June 2017
Environmental Permitting	2015	November 2017
Right-of-Way Acquisition	November 2015	November 2017
Construction	April 2018	December 2018

2.5 Permits and Approvals

Before construction activities begin, the County and its contractors would obtain all necessary permits and approvals. Table 2-3, "Permits and Regulatory Approvals Potentially Required for the Project," provides a preliminary listing of anticipated permits and regulatory approvals necessary for the Project.

Table 2-3. Permits and Regulatory Approvals Potentially Required for the Project		
Approving Agency	**Required Permit/Approval**	**Required For**
FEDERAL AGENCIES		
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Non-Reporting Permit (Clean Water Act, 33 U.S. Code [USC] 1341)	Discharge of dredge/fill material into waters of the United States, including wetlands
STATE AGENCIES		
State Water Resources Control Board, Central Valley Regional Water Quality Control Board	General Construction Activity Storm Water Permit, Notice of Intent (40 CFR Part 122)	Stormwater discharges associated with construction activity
	National Pollutant Discharge Elimination System (NPDES) Permit (Clean Water Act, 33 USC 1251 et seq.)	Stormwater discharges associated with industrial activity, unless covered by individual NPDES permit
	Section 401 Water Quality Certification	Construction activities that could impact waters of the state
	Waste Discharge Requirements (Water Code 13000 et seq.)	Discharge of waste that might affect groundwater quality
	Water Quality Certification (Clean Water Act), if project requires U.S. Army Corps of Engineers Section 404 Permit.	Discharge into waters of the United States, including wetlands (see U.S. Army Corps of Engineers, Section 404 Permit, above)
California Department of Fish and Game	Lake/Streambed Alteration Agreement (Fish and Game Code Section 1600)	Change in natural state of river, stream, lake (includes road or land construction across a natural streambed), which affects fish or wildlife resource

Table 2-3. Permits and Regulatory Approvals Potentially Required for the Project		
Approving Agency	**Required Permit/Approval**	**Required For**
LOCAL AGENCIES		
El Dorado County Air Quality Management District	Dust Mitigation Plan	Minimization of construction emissions associated with construction of the proposed project

CHAPTER 3
ENVIRONMENTAL IMPACT ANALYSIS

CHAPTER 3—ENVIRONMENTAL IMPACT ANALYSIS

3.1 Introduction

Sections 3.2 through 3.11 of this Draft Subsequent Environmental Impact Report (Draft SEIR) present the environmental impact analysis for the proposed Project. Cumulative and growth-inducing impacts of the Project are presented in Chapter 4 and Project alternatives are described and evaluated in Chapter 5.

This "Introduction" section discusses the relationship of the Project and the analysis presented in this Draft SEIR to the project and analysis presented in the original Bass Lake Road Realignment EIR (El Dorado County 1992) and its 2001 addendum. This section then discusses the Project study area for the environmental analysis and provides an overview of the structure of each of the resource sections (Sections 3.2 through 3.11) herein. This section concludes with a list of the resource subjects evaluated in this Draft SEIR and identifies which effects were found not to be significant and are, thus, not evaluated further in this Draft SEIR.

3.1.1 Relationship to the 1992 Bass Lake Road Realignment EIR and 2001 Addendum

The 1992 Bass Lake Road Realignment EIR and 2001 addendum to that document documented the environmental review for construction of a new road connection between Bass Lake Road and Green Valley Road along the alignment of what is now referred to as Silver Springs Parkway. That previous environmental review identified impacts and mitigation measures associated with land use, Williamson Act lands, biological resources, wetlands, cultural and historic resources, noise, air quality, and aesthetics. It also addressed issues associated with growth-inducing impacts and alternatives to that proposed project. The project evaluated at that time was the entire segment of the new roadway between Bass Lake Road and Green Valley Road. Since that time, the northern segment of the Silver Springs Parkway has been constructed. The current Project is construction of the southern portion of that roadway. This Draft SEIR supersedes the 1992 EIR and 2001 Addendum and provides a comprehensive update of the impact analysis and mitigation requirements associated with construction and operation of the Project segment of the alignment.

3.1.2 Project Study Area

The study area used for the evaluation of impacts associated with the resource categories listed above varies based on the physical parameters associated with the analysis of each resource topic. Impacts associated with temporary or permanent ground disturbance were evaluated within the Project construction disturbance areas. Potential impacts associated with soils and geology, water resources, biological resources, and cultural resources are evaluated within this area, and the study areas for each of those resources are discussed in the respective resource sections of this chapter. The study areas for other resources include additional areas as needed to evaluate impacts that extend beyond the physical disturbance area of the Project. For instance, the noise analysis study area encompasses residential properties and other sensitive noise

receptors in areas adjacent to the Project site and along study area roads. The traffic analysis study area includes roadway segments and intersections along the local road network.

3.1.3 Organization of the Environmental Impact Analysis

Each resource section in this chapter includes a summary of the impacts and mitigation measures identified in the original Bass Lake Road Realignment EIR for that resource subject, when relevant. Each resource section then presents the updated/current evaluation of that resource subject, including a discussion of existing conditions; laws, regulations, and policies; analysis methods and thresholds of significance; environmental impacts associated with the Project; and mitigation measures to avoid or reduce the severity of Project impacts. The general content of each of these sections are described below.

3.1.3.1 1992 Bass Lake Road Realignment EIR Impacts and Mitigation Measures

When relevant, resources sections include a summary of the 1992 Bass Lake Road Realignment EIR impact conclusions and mitigation measures pertaining to the resource subject. In some instances, the 1992 EIR did not contain evaluation of certain resource subjects that are included herein, and that is noted.

3.1.3.2 Environmental Setting

The "Environmental Setting" subsections present relevant information on the physical environment and conditions associated with the resource subject. This information provides the context and is used as the baseline for analyzing the significance of the probable environmental effects of the Project with respect to each specific issue area in accordance with the California Environmental Quality Act (CEQA) Guidelines, Section 15125.

3.1.3.3 Regulatory Framework

The regulatory framework sections identify federal, state, regional, and local agencies that have jurisdictional control over certain aspects of the Project, including permitting or other approvals. The section explains the presiding agency's jurisdictional power and lists the specific documents, standards, or policies that relate to the environmental issue area.

3.1.3.4 Methods and Thresholds of Significance

Each resource section in this chapter (Section 3.2 through 3.11) provides a discussion of the general methods and criterion used for assessing Project impacts and defines the issues and thresholds used for determining whether an impact would be significant.

Under CEQA, a significant effect is defined as a substantial adverse change in the environment (Public Resources Code Section 21068). Impact determinations are to be based on facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (Public Resources Code Section 21082.2). When possible, a determination of each impact's significance is based on quantified information compared to a quantified threshold. Each resource section defines the criteria and thresholds used for determining impact significance.

Adverse Project impacts are identified as *significant*, *potentially significant*, or *less than significant* based on the projected significance of the impact in the absence of mitigation. Unless

an impact or Project outcome is specifically identified as beneficial, impacts discussed herein are considered to be adverse impacts. When an impact issue is identified and analyzed, and the analysis concludes that the Project would not result in an adverse impact, a determination of *no impact* is made.

Definitions of each type of adverse impact are provided below:

- A *significant* is defined by CEQA Section 21068 as one that would cause "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project." Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to the proposed project must be provided, where feasible, to reduce the magnitude of significant impacts.
- A *potentially significant impact* is an environmental effect that, if it were to occur, would be considered a significant impact as described above; however, the occurrence of the impact cannot be immediately determined with certainty. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- A *less-than-significant impact* is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation under CEQA.
- A *no impact* determination is made when the analysis of a potential impact subject determines that no impact would occur.
- A *significant and unavoidable* impact is an environmental effect that is determined to be either *significant* or *potentially significant* that cannot be reduced to a less-than-significant level even with implementation of feasible mitigation. Under CEQA, a project with significant and unavoidable impacts can proceed, but the lead agency is required to prepare a "statement of overriding considerations" in accordance with CEQA Guidelines.

3.1.3.5 Environmental Impacts and Mitigation Measures

The "Environmental Impacts and Mitigation Measures" subsections identify the environmental impacts of the proposed Project and identify mitigation measures to reduce significant and potentially significant impacts (as defined in the preceding section). The relevant thresholds of significance used to identify impacts and methodology used in the analysis are presented before the evaluation of impacts. Throughout the discussion, impacts are identified numerically and sequentially. For example, impacts discussed in Section 3.2 are numbered as 3.2-1, 3.2-2, and so on. An impact statement presented at the beginning of each impact discussion provides a summary of the impact and its level of significance. Following the impact statement, more detailed discussion of the analysis and the impact is provided, including the conclusion on the level of significance for the impact. For significant and potentially significant impacts, mitigation measures that may be available to avoid or reduce the impact are discussed and a conclusion regarding the impact significance with implementation of proposed mitigation is provided. In some instances, mitigation measures are also identified for less-than-significant impacts. Specific mitigation measures (both a summary statement and the full mitigation description) are presented following the impact discussion and are numbered consistent with the numbering used for the associated impact.

3.1.4 Effects Found Not to Be Significant

Issues evaluated in these sections consist of a range of environmental topics based on CEQA guidelines and as identified through the EIR scoping process. (See Appendix A, "SEIR Scoping Records," for comments received during scoping and public input conducted by the County when initiating preparation of this Draft SEIR.)

Each resource subject area identified in the environmental checklist of Appendix G of the CEQA Guidelines was considered to determine whether the Project could result in one or more significant impacts associated with that resource. Based on that initial review, in consideration of potential impacts, certain resource subject areas were determined to require detailed analysis, while other resource subject areas were determined to not have the potential for significant impacts associated with the Project and were therefore eliminated from further consideration in this Draft SEIR. As a result of that review, the resource topics evaluated in this chapter are:

- aesthetics (Section 3.2),
- air quality and greenhouse gases (Section 3.3),
- biological resources (Section 3.4),
- cultural resources (Section 3.5),
- geology and soils (Section 3.6),
- hazards and hazardous materials (Section 3.7),
- hydrology and water quality (Section 3.8),
- land use and planning (Section 3.9),
- noise (Section 3.10), and
- traffic and transportation (Section 3.11).

Resource subject areas/issues identified in the CEQA Appendix G Environmental Checklist that have been considered but eliminated from further consideration in this Draft SEIR are listed below with the rationale for their elimination from further consideration:

3.1.4.1 Agricultural/Forestry Resources

The El Dorado County Important Farmland Map (DOC 2014) identifies that lands within the Project site are designated as grazing land and are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No lands are held under Williamson Act contracts within the Project site. Impacts associated with the removal of trees and oak woodlands as a result of the Project are addressed in the impact analysis presented in Section 3.2, "Land Use," and Section 3.9, "Biological Resources."

3.1.4.2 Mineral Resources

The Project would not result in the loss, or availability, of a mineral resource of value to the region or state and the Project site is not within a locally important mineral resource recovery site.

3.1.4.3 Population and Housing

The Project would not displace existing housing or people and would therefore not necessitate the construction of replacement housing.

3.1.4.4 Public Services

The Project would not result in, or generate the need for, new or physically altered governmental facilities for fire protection, police protection, schools, parks, or other public facilities.

3.1.4.5 Recreation

The Project would not increase the use of existing parks or other recreational facilities, and the Project does not include construction or expansion of recreational facilities.

3.1.4.6 Utilities and Service Systems

The Project would not contribute to the need for wastewater treatment and would not require or result in the construction of water or wastewater treatment facilities. Construction debris would be limited and would be properly disposed at permitted facilities. The Project would require the construction of new stormwater drainage facilities to manage stormwater runoff from within and through the Project site both during construction and after completion of the road segment and relocation of utilities. Utilities that would be constructed or relocated as a component of the Project are described in Chapter 2, and the resource evaluations in this Draft SEIR consider potential environmental impacts associated with these facilities. Transportation staff would coordinate utility relocations with construction contractors and the various utility companies to ensure that the relocations are consistent with the Project schedule and Project design and that the potential for interruption to service is minimized.

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3.2 Aesthetics

This section discusses potential impacts of the Project on visual resources. The degree to which the change of visual character of an area is adversely affected by a project that alters the visual character is subjective and largely depends on the perspective of each individual viewer. Nonetheless, this chapter provides an objective discussion of the visual character of the Project area and provides an assessment of the anticipated average viewer response to visual changes that would occur as a result of the Project.

3.2.1 Summary of the Aesthetics Evaluation in the 1992 Bass Lake Road Realignment EIR

The 1992 Bass Lake Road Realignment EIR evaluated the realignment project's potential to result in aesthetic impacts. The analysis considered the presence of the new road corridor and the removal of vegetation and woodland areas from within the alignment as viewed from both Green Valley Road and Bass Lake Road. The evaluation concluded that:

- although the new road would alter the rural character of the area, other anticipated development within the area would also result in changes to the visual character of the area;
- other "development features would overshadow any adverse aesthetic impacts to the roadway [would] create"; and
- the visual/aesthetic impact of the realignment project would be less than significant.

The 1992 Bass Lake Road Realignment EIR did, however, identify the following mitigation for aesthetic impacts:

> **1992 EIR Mitigation Measure K-1.** *Graded areas shall be reseeded with grasses to improve the aesthetic appearance of the cut and fill areas and to stabilize the erosion process.*
>
> **1992 EIR Mitigation Measure K-2.** *The median strip shall be planted with trees and/or shrubs to improve the overall aesthetic appearance of the roadway.*
>
> **1992 EIR Mitigation Measure K-3.** *Implement mitigation measures G-1 through G-5, which are designed to protect wetland areas.*
>
> **1992 EIR Mitigation Measure K-4.** *Implement mitigation measures F-1 through F-5, which are designed to prevent unnecessary damage to the oak trees near the realignment route.*

3.2.2 Environmental Setting

El Dorado County is located in the foothills of the northern Sierra Nevada just west of the Tahoe Basin. Mountainous terrain makes up the eastern edge of the county, while urbanized areas such as Folsom, Sacramento, and Auburn surround the western portion of the county. The county has a broad range of landscapes that change with elevation, creating diverse environments, natural communities, and landforms. Rolling hills dotted with mature oaks and oak woodlands, agricultural land, apple orchards and vineyards, evergreen forests and snow-capped mountains, scenic rivers, alpine lakes, and historic structures all contribute to the visual character found in

the county. This diversity is an important element of El Dorado County's visual heritage and one that many residents value as part of their quality of life.

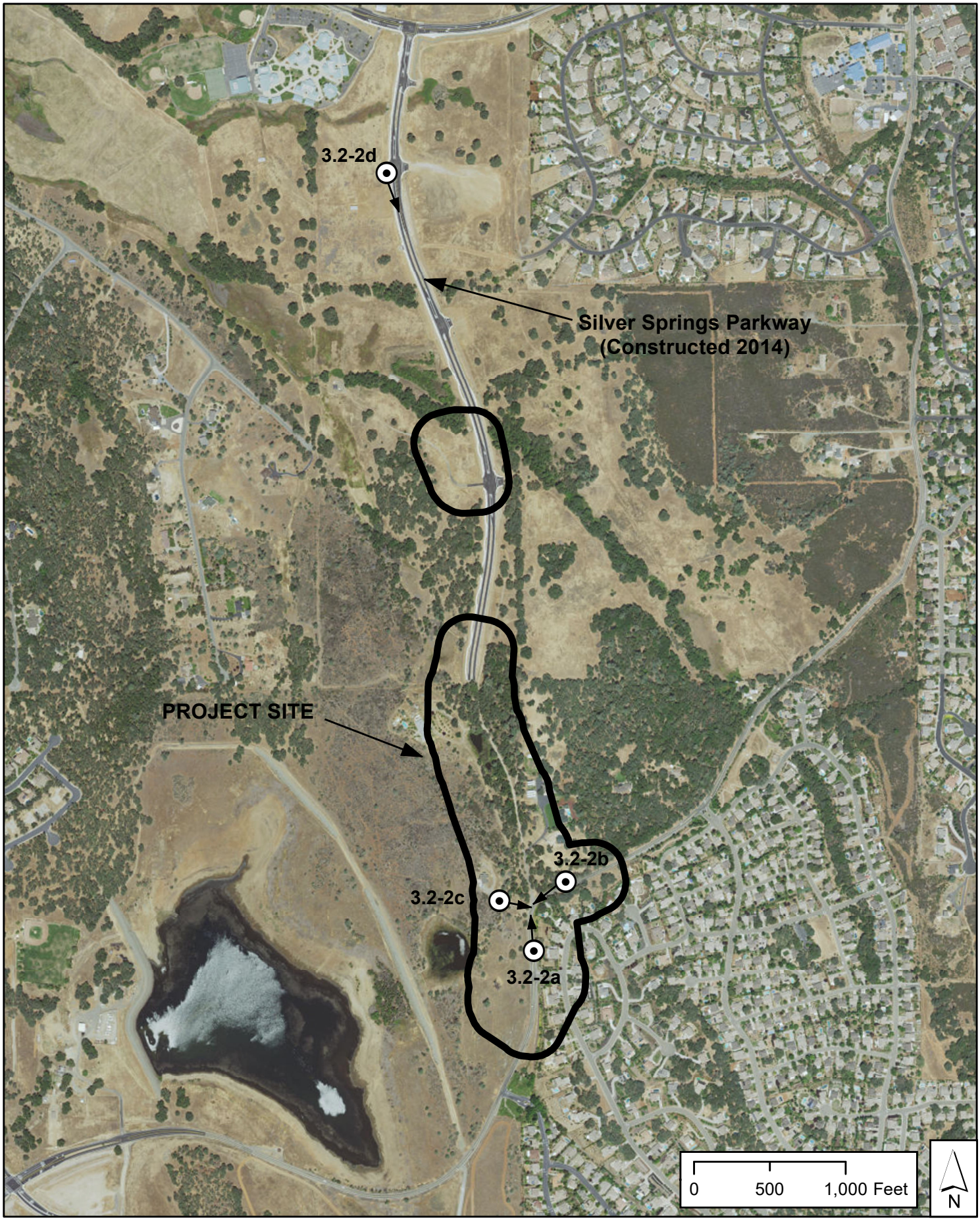
The Project region in the foothills of the Sierra Nevada mountain range is a transition point between the agricultural lands and urban development in the Sacramento Valley to the west and the mountainous and rural areas to the east. The El Dorado Hills and Cameron Park areas include a mix of suburban development and large open spaces. Topography within the area consists of rolling foothills. The Project site elevation is about 1,200 feet above mean sea level (amsl) while surrounding hillsides are up to 1,400 to 1,500 feet amsl. Residential and commercial uses and roads have been developed within the area. El Dorado Hills undeveloped areas, with native shrubs, oak woodlands and annual grasses, compose a more limited portion of the existing landscape.

As discussed in the 1992 EIR, the Project is located in a semi-rural area in western El Dorado County. The area's once primary activity of cattle grazing is being displaced by residential development. The development that has taken place has caused the aesthetic qualities of the rural environment to have a more suburban, developed character, which includes wider transportation corridors (roads with vehicle lanes, bicycle lanes, and sidewalks) and residential developments. Considerable residential development activity occurred in areas south, southeast, and southwest of the Project site in the time since the 1992 EIR was certified. Additional development has been approved and is anticipated in areas north and northeast of the Project, including the Silver Springs Subdivision. The northern segment of Silver Springs Parkway has been constructed, resulting in a recent substantial change to the former character of the Project area.

Notwithstanding the existing and planned future development, the Project site and much of the adjacent areas retain a definitively rural character. Bass Lake and the open space surrounding the lake provide a sense of openness and "country" character that are not negated by area development. Oak trees/woodlands and grassland areas still compose much of the visual character, even as interspersed between and within developed areas.

3.2.2.1 Views of the Project Site

Representative photographs are included in this chapter to illustrate the visibility and views of the site from surrounding areas. Figure 3.2-1, "Representative Photo Locations," identifies the location and direction from which representative photographs were taken. Figure 3.2-2, "Representative Photos," provides photographs of existing conditions. The Project site has limited visibility to motorists and cyclists on Bass Lake Road, but these viewers represent the largest collective set of individuals viewing the site. Views from other areas to the west, east, and south of the site also include the Project site and have the potential to be adversely affected by the Project. The following sections describe the view, typical viewer, and the anticipated quality of the view to individual viewers from various locations.



SOURCE: Benchmark Resources 2015
BASE MAP: ESRI 2015

Figure 3.2-1. Representative Photo Locations

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Figure 3.2-2(a): View from Existing Bass Lake Road Facing North
Toward Proposed Intersection with Silver Springs Parkway

Figure 3.2-2(b): View from Existing Bass Lake Road Facing Southwest
Toward Proposed Intersection with Silver Springs Parkway

SOURCE: Benchmark Resources 2015

Figure 3.2-2. Representative Photos (Part 1)

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Figure 3.2-2(c): View from Just West of Existing Bass Lake Road Facing East Toward Proposed Intersection with Silver Springs Parkway

Figure 3.2-2(d): View from Silver Springs Parkway North Segment Facing South

SOURCE: Benchmark Resources 2015

Figure 3.2-2. Representative Photos (Part 2)

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3.2.2.1.1 Views from West of the Project Site

Views of the Project site occur from limited segments of public roads and a number of residential properties to the west of the Project site. Elevated areas with unobstructed views toward the site are limited, with a limited number of viewers, but do exist. Although there are a limited number of individuals for whom views of the Project site are visible, the duration of the views may be extended (from private outdoor use areas). The quality of the view is considered moderate to high, consisting of residential rooftops and large areas of open space with grasslands, oak canopy, and Bass Lake also visible from some areas. Two residences are located immediately west of the project segment of the proposed Silver Springs Parkway. Access to one of these properties was not available during preparation of this Draft SEIR and a site visit to the other property was not conducted, therefore assessment of the specific viewshed visible from these properties was not conducted. However, it is assumed that views of the Project corridor from both within the residences and from other areas of the properties exist. Views from these properties toward the Project alignment are considered high quality for the purposes of this analysis, consisting primarily of oak woodlands, the pond in the northern portion of the Project site, and the relatively unobtrusive character of the existing narrow, unpaved segment of Sandhurst Hill Road that may be visible from the properties.

3.2.2.1.2 Views from East of the Project Site

Views of the Project site from areas to the east are more limited than those to the west. A hilltop within the Silver Springs Subdivision area shields views from areas to the east. Motorists and cyclists on southbound Bass Lake Road approaching the location where the intersection of Silver Springs Parkway/Bass Lake Road is proposed to be located have short views of that location as they approach from the northeast. Views for this limited segment include oak trees and canopy, residences and a soundwall on the left (south) side of the road, and Bass Lake Road itself in the direct line of sight. Although several motorists use this segment of Bass Lake Road daily, the duration of their exposure is short and the visual quality of the view is considered moderate. A residence is located immediately east of the Project segment of the proposed Silver Springs Parkway. Access to this property was not available during preparation of the Draft EIR; thus, an assessment of the specific viewshed visible from this property was not possible. However, it is assumed that views of the Project corridor from both within the residence and from other areas of the property are available. Views from this property toward the Project alignment are considered high quality for the purposes of this analysis, consisting primarily of oak woodlands and the relatively unobtrusive character of the existing narrow unpaved segment of Sandhurst Hill Road that may be visible from this property.

3.2.2.1.3 Views from South of the Project Site

Views of the Project site from areas to the south are limited primarily to northbound motorists and cyclists on Bass Lake Road. On approach, the view of the southern end of the Project site is generally unobstructed and dominated by the existing narrow lane, Sandhurst Hill Road, oak trees/canopy, and Bass Lake Road. Although several motorists use this segment of Bass Lake Road daily, the duration of their exposure is short and the visual quality of the view is considered moderate. It is also possible that some residential properties

immediately south of the Bass Lake Road portion of the Project site may have views of this portion of the Project site. Those views would consist of the existing segment of Bass Lake Road and adjacent open space/oak woodlands and structures associated with the residential property to the north.

3.2.2.1.4 Views from North of the Project Site

Views of the Project site from the north are limited to nonexistent from properties other than those privately held by the Silver Springs Development property owner. The Project site is sufficiently south of Green Valley Road and adjacent development limits its view from these areas. Views from these undeveloped parcels south toward the site are considered moderate quality, with open space of grasslands and tree canopy/woodlands, but the recent addition of Silver Springs Parkway north of the Project site has reduced the rural nature/quality of views from this area. Regardless, with the limited number of viewers under existing conditions, views from areas north of the site are not considered sensitive.

3.2.2.2 Light and Glare

There are no existing street lights or other fixed sources of light within the Project site. Sources of light and glare within the Project segment are limited to the few vehicles that may be traveling at nighttime to and from the two residences currently accessed from Sandhurst Hill Road. Sources of light within the existing segment of Bass Lake Road also consist of vehicle lights from motorists on this segment of roadway. Lighting within the surrounding area is primarily limited to lighting at residences and street lighting.

3.2.3 Regulatory Framework

No federal or state regulations pertaining to visual resources apply to the Project. However, the California Department of Transportation (Caltrans) designates state scenic highways and identifies highways that are eligible for a scenic highway designation, and this program is discussed below. The County General Plan (El Dorado County 2004) contains several policies associated with protecting and preserving visual resources within the County and is also discussed below. The County also has several standards and ordinances which that address design, lighting, and other visual aspects of development projects. None have been identified has having relevance to the proposed Project.

3.2.3.1 Scenic Highways

The intent of the California Scenic Highway Program is "to protect and enhance California's natural scenic beauty and to protect the social and economic values provided by the State's scenic resources" (Caltrans 2001). Caltrans administers the program, which was established in 1963 and is governed by the California Streets and Highways Code (Section 260 et seq.). The goal of the program is to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of the adjacent land.

- Several highways in El Dorado County have been designated by Caltrans as scenic highways or are eligible for such designation. The following state scenic highways have been designated in the County:

- U.S. Highway 50 (U.S. 50) from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe (U.S. 50 in the area of the Project is not designated as a California Scenic Highway),
- all of State Route (SR) 89 within the County, and
- those portions of SR 88 along the southern border of the County.

In addition, all of SR 49 within El Dorado County is eligible for designation as a state scenic highway, but has not been designated.

The Project site is not visible from any state highway.

3.2.3.2 El Dorado County General Plan

The following policies of the County General Plan (El Dorado County 2004) have been identified as having potential applicability to the proposed Project or otherwise have relevance in considering the potential visual impacts of the Project:

> **Policy TC-1w:** New streets and improvements to existing rural roads necessitated by new development shall be designed to minimize visual impacts, preserve rural character, and ensure neighborhood quality to the maximum extent possible consistent with the needs of emergency access, on street parking, and vehicular and pedestrian safety.

Goal 2.3: Natural Landscape Features—Maintain the characteristic natural landscape features unique to each area of the County.

Objective 2.3.1: Topography and Native Vegetation—Provide for the retention of distinct topographical features and conservation of the native vegetation of the County.

> **Policy 2.3.1.1:** The County shall continue to enforce the tree protection provisions in the Grading Erosion and Sediment Control Ordinance and utilize the hillside road standards.

> **Policy 2.3.1.2:** The Zoning Ordinance shall include consideration of a standard for parking lot shading and provision of street trees in all new development projects.

Objective 2.3.2: Hillsides and Ridgelines—Maintain the visual integrity of hillsides and ridge lines.

> **Policy 2.3.2.1:** Disturbance of slopes thirty (30) percent or greater shall be discouraged to minimize the visual impacts of grading and vegetation removal.

Goal 2.6: Corridor Viewsheds—Protection and improvement of scenic values along designated scenic road corridors.

Objective 2.6.1: Scenic Corridor Identification—Identification of scenic and historical roads and corridors.

> **Policy 2.6.1.1:** A Scenic Corridor Ordinance shall be prepared and adopted for the purpose of establishing standards for the protection of identified scenic local roads and State highways. The ordinance shall incorporate standards that address at a minimum the following:

A. Mapped inventory of sensitive views and viewsheds within the entire County;
B. Criteria for designation of scenic corridors;
C. State Scenic Highway criteria;
D. Limitations on incompatible land uses;
E. Design guidelines for project site review, with the exception of single family residential and agricultural uses;
F. Identification of foreground and background;
G. Long distance viewsheds within the built environment;
H. Placement of public utility distribution and transmission facilities and wireless communication structures;
I. A program for visual resource management for various landscape types, including guidelines for and restrictions on ridgeline development;
J. Residential setbacks established at the 60 CNEL noise contour line along State highways, the local County scenic roads, and along the roads within the Gold Rush Parkway and Action Program;
K. Restrict sound walls within the foreground area of a scenic corridor; and
L. Grading and earthmoving standards for the foreground area.

Goal 2.8: Lighting—Elimination of high intensity lighting and glare consistent with prudent safety practices.

Objective 2.8.1: Lighting Standards—Provide standards, consistent with prudent safety practices, for the elimination of high intensity lighting and glare.

Policy 2.8.1.1: Development shall limit excess nighttime light and glare from parking area lighting, signage, and buildings. Consideration will be given to design features, namely directional shielding for street lighting, parking lot lighting, sport field lighting, and other significant light sources, that could reduce effects from nighttime lighting. In addition, consideration will be given to the use of automatic shutoffs or motion sensors for lighting features in rural areas to further reduce excess nighttime light.

3.2.3.3 El Dorado County General Plan—Scenic Viewpoints

As referenced above in Policy 2.6.1.3, the General Plan identifies "important public scenic viewpoints" in General Plan Draft EIR Table 5.3-1. None of the important public scenic viewpoints have views of the Project site.

3.2.4 Methods and Significance Criteria

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of aesthetic impacts:

a) substantial effects on a scenic vista;

b) substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c) substantial degradation of the existing visual character or quality of the site and its surroundings; and

d) creation of a new source of substantial light and glare which would adversely affect day or nighttime views in the area.

Visual impacts were determined by assessing changes to the visual character of the Project area caused by the visible changes that would occur as a result of the Project and estimating typical viewer response to the change. The viewer response to Project changes is estimated through consideration of the quality of the view, the typical viewer and assumed sensitivity to visual changes, the duration of typical views, and the general number of viewers that may be affected. Representative view locations and viewsheds described in Section 3.2.2 were considered to assess the existing view quality and viewer sensitivity. Photo simulations to illustrate the appearance of proposed facilities are not necessary for this analysis because the roadway construction would have a typical appearance associated with other roads developed within the County. Photographs of the existing recently constructed northern segment of Silver Springs Parkway are representative of the appearance anticipated for the Project segment of Silver Springs Parkway (see Figure 3.2-2).

Generally, motorists on area roadways are considered to be less sensitive to changes when traveling through areas with existing development, whereas residents, workers, or other individuals with direct views of an area are considered to be more sensitive to visual changes. Conversion of natural or undeveloped areas to developed uses is generally considered adverse, although this depends partly on the existing quality of the view of an undeveloped area and the development that would occur.

The resulting degree of anticipated visual impact is determined by combining the severity of resource change with the degree of reaction the visual change may have on a typical viewer based on views common and appropriate to the region as perceived by most viewers. Therefore, the analysis and determinations of impact significance attempt to capture differences in viewer sensitivity depending on viewer location, type, duration, and other factors.

The following ratings are used to determine the significance of changes to the visual character of the Project area:

Low—A temporary or long-term change to the existing visual environment with a predicted low adverse response to the change by most viewers. Impact is considered less than significant and does not require mitigation.

Moderate—A long-term or permanent change to the existing visual environment with a predicted moderate adverse response to the change by most viewers. Impact is considered potentially significant. If feasible mitigation to avoid or substantially reduce the visual effect is available, it shall be implemented. If mitigation does not reduce the impact to less than significant, the impact is considered significant and unavoidable.

High—A permanent change to the existing visual environment with a predicted high adverse response to the change by most viewers. Impact is considered significant. If feasible

mitigation to avoid or substantially reduce the visual effect is available, it shall be implemented. If mitigation does not reduce the impact to less than significant, the impact is considered significant and unavoidable.

3.2.5 Impacts and Mitigation Measures

Impact 3.2-1: Temporary degradation of visual character resulting from construction activities. (Less than Significant)

Project construction activities would result in the short-term presence of construction vehicles and equipment, grading, and up to approximately 13.5 acres of vegetation clearing and other ground disturbance within the Project site, including the storage of equipment and materials in one or more of the potential construction staging areas. Construction activities would be most noticeable to motorists on Bass Lake Road immediately approaching the Project site, within the Project site portion of Bass Lake Road, and adjacent to potential construction staging area 1. Construction activities, vehicles, equipment, and denuded/graded areas could also be visible from some residential properties, including the three properties immediately adjacent to the proposed alignment of Silver Springs Parkway.

The presence of construction vehicles, equipment, and construction activities, including grading and vegetation clearing, would result in a moderate change in the visual character of the Project site. Because substantial development has occurred and continues to occur in the Project vicinity (including new roadway development along Bass Lake Road south of the Project site and residential development in surrounding areas, the visible evidence of construction activities are not new or uncommon components of views within the Project area.

Construction activities would be temporary and areas disturbed during construction not developed with roadway and related facilities would be revegetated or available for landscaping. The temporary visual impact of construction activities is considered low and is not expected to result in a substantial adverse response from the typical viewer. Therefore, the visual impact of construction of the Project is considered less than significant and no mitigation is required.

Impact 3.2-2: Permanent alteration of existing visual character of the Project site as viewed from adjacent areas. (Potentially Significant)

The Project would introduce a permanent physical change to the Project site as a result of the new road facilities and elimination of existing vegetation within the alignment.

The permanent change to the visual character of the Project site would be visible to motorists on segments of both approaching segments of the existing Bass Lake Road. (The new road would also be visible to southbound viewers on the approaching segment of the recently constructed segment of Silver Springs Parkway from the north of the Project site; however, because this segment is not currently used, no existing viewers that would be affected are in this area.) The permanent Project roadway facilities and vegetation clearing could also be visible from residential properties immediately adjacent to the Project site and other more distant residential properties that may have limited views of the area.

The most substantial physical changes visible to the greatest number of viewers are anticipated to occur to northbound Bass Lake Road motorists approaching the Project site. The current view is of the relatively narrow Bass Lake Road and its eastern curve in the southern portion of the site. This view would be altered with the new road and the road would add a highly visible developed component to the view, which is currently dominated by oak canopy and the narrow gravel Sandhurst Hill Road. The Project segment of Silver Springs Parkway is within the viewshed from portions of the three adjacent residential properties. The removal of oak trees and the presence of the new road segment would adversely alter the existing views to varying degrees. It is anticipated that westward views (toward the Project) from the residence located east of the site would continue to be at least partially screened by existing oak trees that would be retained. It is anticipated that eastward views (toward the Project) from the residences located west of the site would likely experience a greater amount of visual change as a result of removal of oak trees and, for the northernmost residence, removal of the pond.

Revegetation of areas with temporary construction disturbance would be done as a component of the Project to stabilize soils, as described in Chapter 2. This vegetation would reduce the visibility of barren soils and would soften the visual contrast of the Project as compared to adjacent areas. The Project does not include landscaping along the extension segment; however, landscaping could be installed along this segment at a future date by the El Dorado Hills CSD. In the absence of landscaping, the Project hardscape areas and the cleared corridor of the Project right-of-way would have a substantial contrast to adjacent areas and to typical parkway designs within the area. The Project is therefore considered to have a moderate to high physical change to the visual character of the Project site and this impact is considered potentially significant. Mitigation Measure 3.2-2, below, requires the preparation of a Project landscaping plan that includes trees, shrubs, and groundcover in median and perimeter areas and requires installation of landscaping consistent with the plan within 3 years of initial clearing of the Project right-of-way for construction. This mitigation is generally consistent with Mitigation Measure K-2 from the 1992 Bass Lake Road Realignment EIR, which specified "*the median strip shall be planted with trees and/or shrubs to improve the overall aesthetic appearance of the roadway*." Implementation of Mitigation Measure 3.2-2 would reduce the visual contrast of the Project by softening the visual appearance of the cleared right-of-way and by achieving a parkway corridor consistent with other developed parkways in western El Dorado County. Implementation of Mitigation Measure 3.2-2 would reduce this impact to less than significant.

Mitigation Measure 3.2-2: ***The County shall prepare and implement a Project corridor landscaping plan within 3 years of Project construction.***

The County shall prepare and implement a landscaping plan as a component of the Project that provides for a combination of vegetative plantings and other groundcover to minimize the amount of denuded and disturbed soils within the Project corridor. Vegetative plantings shall be drought tolerant. Plantings of oak trees within the median and the perimeter of the Project shall be considered and undertaken to the extent feasible. (Oak tree plantings undertaken as a component of the landscaping plan may also be counted toward onsite oak replacement mitigation requirements.)

When developing the plan, plantings shall be selected with consideration given to maintaining adequate sight-distance and visibility for motorists using the roadway and intersecting driveways. The landscaping plan shall be prepared and implemented by the County, or through coordination with a Community Services District (CSD). Funding for development of the landscaping plan, and for installation and long-term maintenance shall be included as a component of the Project, which may include annexation to or establishment of a landscaping and lighting district. Landscaping shall be installed within 3 years of Project construction.

Significance with Mitigation: Less than Significant

Impact 3.2-3: Light and glare from motor vehicles. (Less than Significant)

The Project would introduce through-travel motor vehicle use on the Project segment of Silver Springs Parkway. Vehicle headlights from these motorists would add a new source of lighting visible from residential properties immediately adjacent to, and some at greater distances from, the Project site. Motor vehicles operating at nighttime along the Project segment of Silver Springs Parkway would increase and add to the intermittent visibility of motor vehicle lights and the intermittent lighting of adjacent areas from motor vehicle headlights. Residences near the Bass Lake Road/Silver Springs Parkway intersection are separated from the intersection by existing soundwall and/or fencing; however, it is anticipated that some degree of increased visibility of intermittent vehicle headlights may occur at a limited number of residences. In particular, at the new intersection left-turn movements from southbound vehicles turning east onto Bass Lake Road and the elevated profile of Bass Lake Road (up to 3 feet higher than the existing profile near the intersection) could result in intermittent headlight shine toward these residences. However, the new road segment would result in a reduced number of vehicles using the segment of Bass Lake Road east of the new intersection, and would be expected to reduce the overall occurrence of headlight shine at these residences. The three residences immediately adjacent to the Project segment of Silver Springs Parkway are generally perpendicular to the direction of travel on that segment. Vehicle lights may be visible and there may be occurrences of direct shine/illumination of these properties. However, the potential for direct headlight shine into residences and disturbance of residents is not anticipated to result in a significant impact due to the distance, elevation differences, and the direction of vehicles generally perpendicular to and not directly toward residences.

Installation of traffic signals and street lighting is not proposed as a component of the Project. The traffic study's analysis of existing and future (2035) conditions does not indicate a need for traffic signal installation, however, it is possible that increases in traffic in the area could warrant the installation of a traffic signal at the proposed Bass Lake Road/Silver Springs Parkway intersection at some time in the future. It is also possible that street lighting installation could be considered at a future date. Because neither of those potential future lighting sources is proposed or required as a component of the Project, neither is reasonably foreseeable and evaluation of the associated potential light and glare impacts is not warranted in this Draft SEIR. In the event that either of these new lighting sources is considered in the future, the potential light and glare and other environmental effects would be evaluated as necessary at that time.

Although the Project would introduce new light sources associated with motor vehicle lights, minimal direct shine/illumination of residences or other light-sensitive areas is anticipated to occur. As a result, this impact is considered less than significant.

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3.3 Air Quality and Greenhouse Gases

KD Anderson & Associates, Inc. (KDA) prepared an air quality impact assessment for the Project. The results of the assessment are documented in the *Silver Springs Parkway to Bass Lake Road (South Segment) Project Air Quality Study* (KDA 2015), which is included as Appendix C of this Draft SEIR. Pertinent information and impact conclusions from the report are included here.

3.3.1 Summary of the 1992 Bass Lake Road Realignment EIR Air Quality Evaluation

The 1992 Bass Lake Road Realignment Project EIR determined that construction activities would generate dust, creating a potential nuisance and adverse health effects. The 1992 EIR also considered the potential for localized pollution "hot spots" as a result of redirection and increased automobile travel and determined that no federal or state air quality standards would be violated. The 1992 EIR contained the following mitigation measures related to dust emissions:

> **1992 EIR Mitigation Measure J-1.** *To mitigate short-term construction impacts, the construction area shall be watered, consistent with any local drought control regulations, to minimize airborne dust.*
>
> **1992 EIR Mitigation Measure J-2.** *Excessive watering shall be avoided to minimize tracking of mud from construction areas onto local roadways. Airborne dust is created when mud dries and is run over by passing vehicles.*

3.3.2 Environmental Setting

This section provides a description of ambient air quality standards and existing air quality conditions in the Project area.

3.3.2.1 Meteorology and Climate

The Project is located in the Mountain Counties Air Basin (MCAB). The climate of the MCAB is influenced by the foothill and mountainous terrain of the counties in the MCAB. El Dorado County is bordered by the Sacramento Valley to the west and the Nevada state line to the east, with the western portion of the County consisting of rolling Sierra Nevada foothills, and the central and eastern portion of the County consisting of granite peaks reaching up to 10,000 feet in elevation. The climate of El Dorado County is characterized by hot, dry summers and cool, moist winters. The western portion of the County is characterized by higher temperatures and lower annual rainfall, and the central and eastern portions of the County are characterized by lower temperatures and higher annual rainfall.

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions including wind speed, wind direction, and air temperature, in combination with local surface topography (i.e., geographic features such as mountains and valleys), determine air pollutant impacts on local air quality.

Air quality in the Project area is influenced mostly by pollutant transport from upwind areas, such as the Sacramento and San Francisco Bay metropolitan areas, but also by local emissions sources, such as wood-burning stoves and fireplaces during the winter months and vehicles using area roadways and U.S. 50.

3.3.2.2 Air Pollutants and Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards indicate levels of contaminants that represent safe levels to avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The federal and state ambient air quality standards are presented in Table 3.3-1, "Ambient Air Quality Standards." The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is true for ozone and particulate matter less than 10 microns in mean diameter (PM_{10}), also referred to as respirable particulate matter, and particulate matter less than 2.5 microns in mean diameter ($PM_{2.5}$), also referred to as fine particulate matter.

Federal and state standards include three basic designation categories: nonattainment, attainment, and unclassified. A nonattainment designation indicates that the air quality violates an ambient air quality standard. Although a number of areas may be designated as nonattainment for a particular pollutant, the severity of the problem can vary greatly. To identify the severity of the problem and the extent of planning required, nonattainment areas are assigned a classification that is commensurate with the severity of their air quality problem (e.g., moderate, serious, severe). In contrast to nonattainment, an attainment designation indicates that the air quality does not violate the established standard. Finally, an unclassified designation indicates that insufficient data exist for determining attainment or nonattainment. EPA combines unclassified and attainment into one designation for ozone, carbon monoxide (CO), PM_{10}, and $PM_{2.5}$.

3.3.2.3 Criteria Pollutants of Concern

Based on their attainment status, criteria pollutants of greatest concern within the Project area are CO, ozone, and particulate matter. Ozone is a pollutant created in the atmosphere through the combination of reactive organic gas (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight.

3.3.2.4 Carbon Monoxide

Federal and state CO standards have been set for both 1-hour and 8-hour averaging times. The state 1-hour standard is 20 parts per million (ppm) by volume, while the federal 1-hour standard is 35 ppm. Both federal and state standards are 9 ppm for the 8-hour averaging period. CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream.

Table 3.3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	*Method*[4]	*Primary*[3,5]	*Secondary*[3,6]	*Method*[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})[8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter ($PM_{2.5}$)[8]	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
Nitrogen Dioxide (NO_2)[9]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemilumin-escence	100 ppb (188 µg/m^3)	—	Gas Phase Chemilumin-escence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (for certain areas)	—	Spectro-photometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)	—	
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)		75 ppb (196 µg/m^3)	—	—
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13.		No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromato-graphy			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Table 3.3-1. Ambient Air Quality Standards *(continued)*

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]

Notes: µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; ppb = parts per billion; ppm = parts per million.

1. California standards for ozone, carbon monoxide (except S-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. Environmental Policy Agency (EPA) for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by EPA.
8. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m^3 The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
10. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm . To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
13. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: CARB 2013, cited in KDA 2015

Motor vehicles are the dominant source of CO emissions in most areas. High CO levels develop primarily during winter when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures.

3.3.2.4.1 Ozone

Ozone is not emitted directly into the air, but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include ROG and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Once formed, ozone remains in the atmosphere for 1 or 2 days. It is then eliminated through chemical reaction with plants and by rainout and washout.

The state establishes a 1-hour ozone standard of 0.09 ppm. The federal standard for ozone is set at a concentration of 0.08 ppm ozone measured over 8 hours.

3.3.2.4.2 Particulate Matter

PM_{10} is sometimes referred to as "inhalable particulate matter" or "respirable particulate matter." $PM_{2.5}$ is sometimes referred to as "fine particulate matter." Both PM_{10} and $PM_{2.5}$ can reach the lungs when inhaled, resulting in health concerns related to respiratory disease. Suspended particulate matter can also affect vision or contribute to eye irritation.

The state standards for PM_{10} are 50 micrograms per cubic meter ($\mu g/m^3$) 24-hour average, and 20 $\mu g/m^3$ annual geometric mean. The federal PM_{10} standard is a 24-hour average of 150 $\mu g/m^3$. The federal $PM_{2.5}$ standard is 15 $\mu g/m^3$ annually and 35 $\mu g/m^3$ daily. The state $PM_{2.5}$ standard is an annual average of 12 $\mu g/m^3$.

3.3.2.4.3 Air Quality Monitoring

The following table presents air quality monitoring data for four pollutants: CO, ozone, PM_{10}, and $PM_{2.5}$. Table 3.3-2, "Ozone Air Quality Monitoring Data"; Table 3.3-3, "Carbon Monoxide Air Quality Monitoring Data"; Table 3.3-4, "PM_{10} Air Quality Monitoring Data"; and Table 3.3-5, "$PM_{2.5}$ Air Quality Monitoring Data," present monitoring data for these respective constituents. Not all monitoring stations report all pollutants, therefore, a combination of monitoring stations area used.

Table 3.3-2. Ozone Air Quality Monitoring Data

Station and Measurement	Pollutant Concentration (ppm)			
	Air Quality Standard	2011	2012	2013
PLACERVILLE—GOLD NUGGET WAY				
Highest 1-Hour Average	0.09	0.103	0.108	0.097
Second Highest 1-Hour Average	(State)	0.095	0.107	0.093
Highest 8-Hour Average	0.07	0.086	0.096	0.084
Second Highest 8-Hour Average	(State)	0.079	0.094	0.083

Notes: ppm = parts per million.
Source: CARB website: http://www.arb.ca.gov/

Table 3.3-3. Carbon Monoxide Air Quality Monitoring Data				
Station and Measurement	Pollutant Concentration (ppm)			
	Air Quality Standard	2011	2012	2013
SACRAMENTO—DEL PASO MANOR				
Highest 8-Hour Average	9.0	1.60	2.27	1.51
Second Highest 8-Hour Average	(State)	1.45	2.23	1.50

Notes: ppm = parts per million.
Source: CARB website: http://www.arb.ca.gov/

Table 3.3-4. PM_{10} Air Quality Monitoring Data				
Station and Measurement	Pollutant Concentration (micrograms/cubic meter)			
	Air Quality Standard	2011	2012	2013
COLFAX—CITY HALL				
Highest 24-Hour Average	50	—	31.7	57.5
Second Highest 24-Hour Average	(State)	—	29.4	56.1
Annual Average	20 (State)	—	13.7	17.3

Notes: Dashes ("—") indicate insufficient data or no data available.
Source: CARB website: http://www.arb.ca.gov/

Table 3.3-5. $PM_{2.5}$ Air Quality Monitoring Data				
Station and Measurement	Pollutant Concentration (micrograms/cubic meter)			
	Air Quality Standard	2011	2012	2013
AUBURN—11645 ATWOOD ROAD				
Highest 24-Hour Average	35	—	83.3	75.6
Second Highest 24-Hour Average	(Federal)	—	77.5	73.4
Annual Average	12 (State)	—	5.5	6.8

Notes: Dashes ("—") indicate insufficient data or no data available.
Source: CARB website: http://www.arb.ca.gov/

3.3.2.5 Attainment Designations

The current air quality attainment designations the County are summarized in Table 3.3-6, "Air Quality Attainment Status Designations Mountain Counties Air Basin Portion of El Dorado County." As shown, the portion of El Dorado County that includes the Project site is designated nonattainment for the federal and state ozone standards. The Project site portion of the County is designated attainment or unclassified for the federal and state CO and nitrogen dioxide (NO_2) standards. The Project site portion of El Dorado County is designated nonattainment for the state

PM_{10} standard and designated unclassified for the federal PM_{10} standard. The area is designated nonattainment for the federal $PM_{2.5}$ standard and unclassified for the state $PM_{2.5}$ standard.

Table 3.3-6. Air Quality Attainment Status Designations Mountain Counties Air Basin Portion of El Dorado County

Pollutant	Federal Standard	State Standard
Ozone	Nonattainment	Nonattainment
Carbon Monoxide	Unclassified/Attainment	Unclassified
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Inhalable Particulate Matter (PM_{10})	Unclassified	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment (western portion)	Unclassified

Source: CARB website: http://www.arb.ca.gov

3.3.2.6 Emissions Inventory

Table 3.3-7, "El Dorado County Emissions Inventory for 2012," presents a summary of 2012 emissions of select criteria air pollutants generated in El Dorado County from various sources.

Table 3.3-7. El Dorado County Emissions Inventory for 2012

Emission Category	Reactive Organic Gases	Carbon Monoxide	Nitrogen Oxides	Inhalable Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
Fuel Combustion	0.00	0.05	0.17	0.01	0.01
Waste Disposal	0.05	0.00	0.01	0.00	0.00
Cleaning & Surface Coatings	0.54	0.00	0.00	0.00	0.00
Petroleum Production & Marketing	0.34	0.00	0.00	0.00	0.00
Industrial Processes	0.02	0.05	0.01	0.34	0.17
Solvent Evaporation	2.13	0.00	0.00	0.00	0.00
Miscellaneous Processes	1.85	10.59	0.35	8.87	2.18
On-Road Motor Vehicles	2.85	26.56	4.79	0.35	0.15
Other Mobile Sources	3.73	19.31	7.31	9.89	2.81
Total	**11.53**	**56.58**	**7.31**	**9.89**	**2.81**

Notes: All values are in tons per day.
The sum of values may not equal total shown due to rounding.
Source: CARB 2013, cited in KDA 2015

3.3.2.7 Naturally Occurring Asbestos

In addition to criteria pollutants, naturally occurring asbestos (NOA) is also a pollutant of concern in the vicinity of the Project site. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers can result in adverse health effects including as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a noncancerous lung disease which causes scarring of the lungs). Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The map entitled *El Dorado County Asbestos Review Areas—Western Slope* (El Dorado County 2005)[1] identifies areas within which NOA has been found through previous studies and testing, quarter-mile buffer areas around those locations, areas identified by the California Department of Conservation (DOC) as areas more likely to contain asbestos (DOC Open-File Report 2000-002), and quarter-mile buffers from those areas and from fault lines. Review of that map indicates that the Project site is within an area identified as more likely to contain asbestos. Testing of materials present within the Project site has not been conducted to determine the presence or absence of NOA within the site.

3.3.2.8 Global Climate Change and Greenhouse Gases

The El Dorado County Air Quality Management District (EDCAQMD) considers climate change, also known as global warming, to be a serious matter. Documented impacts of climate change include rising sea levels, glacier retreat, shortening of frost seasons, and increases in precipitation, among other events. It is a virtual consensus in the scientific community that climate change is being heavily influenced by the rising concentration of greenhouse gases (GHG), primarily atmospheric carbon dioxide (CO_2).

While CO_2 is the most common component of GHG, several different compounds are components of overall GHG. The different compounds contribute to climate change with varying intensities. The term "CO_2 equivalent" (CO_2e) refers to a weighted composite of these several compounds, expressed as the equivalent amount of CO_2.

GHG emission estimates for the California are from various sources including transportation, electric power generation, commercial and residential sources, industrial activities, recycling and waste, and agriculture. GHG emissions in California are estimated to have been approximately 458.68 million metric tons of CO_2e in 2012 and are forecasted to reach 509.4 million metric tons of CO_2e (CARB 2014).

3.3.3 Regulatory Framework

Air quality management within the MCAB is under the purview of multiple agencies, including the EDCAQMD, CARB, and EPA. Each of these agencies develops rules, regulations, policies, and/or goals to attain the goals or directives imposed through legislation. Although the EPA

[1] *Asbestos Review Areas—Western Slope—County of El Dorado—State of California* is available at http://www.co.el-dorado.ca.us/emd/apcd/PDF/Map.pdf on the EDCAQMD website.

regulations may not be superseded by less stringent state or local requirements, state and local regulations may be more stringent than federal requirements.

3.3.3.1 Federal Air Quality Regulation

At the federal level, EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1963. The CAA was amended in 1970, 1977, and 1990. The CAA requires EPA to establish primary and secondary national ambient air quality standards (NAAQS), as presented in Table 3.3-1, above. The CAA also requires each state to prepare an Air Quality Control Plan referred to as a State Implementation Plan (SIP). The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA has responsibility to review all state SIPs to determine conformation to the mandates of the CAAA and determine if implementation will achieve air quality goals. If the EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area that imposes additional control measures. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

3.3.3.2 State Air Quality Regulation

CARB is the agency responsible for coordination and oversight of state and local Air Pollution Control Programs in California and for implementing the California Clean Air Act (CCAA), which was adopted in 1988. The CCAA requires that all air districts in the state endeavor to achieve and maintain the California ambient air quality standards (CAAQS) by the earliest practical date. The CCAA specifies that districts should focus particular attention on reducing the emissions from transportation and areawide emission sources, and provides districts with the authority to regulate indirect sources.

CARB is primarily responsible for developing and implementing air pollution control plans to achieve and maintain the NAAQS. CARB is primarily responsibility for statewide pollution sources and produces a major part of the SIP. Local air districts are still relied upon to provide additional strategies for sources under their jurisdiction. CARB combines these data and submits the completed SIP to EPA.

Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control and air quality management districts), establishing CAAQS (which in many cases are more stringent than the NAAQS, as presented above in Table 3.3-1, above), determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, and off-road vehicles.

Section 39610(a) of the CCAA directs CARB to "identify each district in which transported air pollutants from upwind areas outside the district cause or contribute to a violation of the ozone standard and to identify the district of origin of transported pollutants." The information regarding the transport of air pollutants from one basin to another was to be quantified to assist

interrelated basins in the preparation of plans for the attainment of CAAQS. Numerous studies conducted by CARB have identified air basins that are affected by pollutants transported from other air basins (as of 1993). Among the air basins affected by air pollution transport from the San Francisco Bay Area Air Basin are the MCAB, the San Joaquin Valley Air Basin, and the Sacramento Valley Air Basin.

3.3.3.3 Local Air Quality Management

The EDCAQMD is the primary local agency responsible for protecting human health and property from the harmful effects of air pollution in the County. EDCAQMD is required to adopt an Air Quality Attainment Plan and establish and enforce air pollution control rules and regulations to attain and maintain all federal and state ambient air quality standards. The EDCAQMD regulates, permits, and inspects stationary sources of air pollution. Among these sources are industrial facilities, gasoline stations, auto body shops, and dry cleaners.

While the state is responsible for emission standards and controlling actual tailpipe emissions from motor vehicles, the EDCAQMD is required to regulate agricultural burning and industrial emissions, implement transportation control measures, recommend mitigation measures for new growth and development designed to reduce the number of cars on the road, and promote the use of cleaner fuels.

3.3.3.3.1 Ozone Attainment Planning

The Project site is located in the Sacramento region's nonattainment area for federal ozone standards. The EDCAQMD, along with other local air districts in the Sacramento region, are required to comply with and implement the SIP to demonstrate when and how the region can attain the federal ozone standards. Accordingly, the Sacramento Metropolitan Air Quality Management District (SMAQMD) prepared the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Attainment Plan) in December 2008, with input from the other air districts in the region. The SMAQMD adopted the Attainment Plan on January 22, 2009, followed by the Feather River Air Quality Management District (FRAQMD) on February 2, 2009; the EDCAQMD on February 10, 2009; the Yolo-Solano Air Quality Management District (YSAQMD) on February 11, 2009; and the Placer County Air Pollution Control District (PCAPCD) on February 19, 2009. CARB determined that the Attainment Plan meets CCAA requirements and approved the Attainment Plan on March 26, 2009, as a revision to the SIP.

The *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* demonstrates how existing and new control strategies would provide the future emission reductions needed to meet the CAA requirements. Adoption of all reasonably available control measures is required for attainment. Measures could include regional mobile incentive programs, urban forest development programs, and local regulatory measures for emission reductions related to indirect source rules, architectural coating, automotive refinishing, natural gas production and processing, asphalt concrete, and various others.

The SMAQMD held a public hearing on the 2013 *Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan*. This hearing was conducted on behalf of the air districts in the Sacramento Federal Ozone Nonattainment

Area, including the YSAQMD, FRAQMD, PCAPCD, and EDCAQMD. The 2013 *Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* was adopted on September 26, 2013, and submitted to CARB. CARB approved the plan on November 21, 2013, and submitted it to EPA to be included in or revise the SIP.

3.3.3.3.2 Fugitive Dust and Naturally Occurring Asbestos Rules

EDCAQMD adopted Rule 223 in 2005 to address fugitive dust and naturally occurring asbestos emissions during construction activities. The general purpose of Rule 223 is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (artificial) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 223-1 is intended to limit fugitive dust emissions from construction-related activities and contains reporting requirements associated with the discovery of naturally occurring asbestos in construction areas. The purpose of Rule 223-2 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 disturb or potentially disturb naturally occurring asbestos by requiring actions to prevent, reduce, or mitigate asbestos emissions. The County Air Pollution Control Officer may provide an exemption from Rule 223-2 if a Professional Geologist has conducted a geologic evaluation of the property and determined that no serpentine or ultramafic rock or asbestos is likely to be found in the area to be disturbed.

3.3.3.4 Climate Change and Atmospheric Greenhouse Gas Emissions

Regulations and regulatory activities associated with climate change and GHG emissions exist at the federal, state, and local level. The following sections provide a general overview of the current status of GHG regulation and planning efforts.

3.3.3.4.1 Federal Plans, Policies, Regulations, and Laws Pertaining to Atmospheric Greenhouse Gases

Supreme Court Ruling Upholding EPA Authority to Regulate CO2 as an Air Pollutant

EPA is the federal agency responsible for implementing the CAA. The U.S. Supreme Court ruled on April 2, 2007, that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate GHG emissions. In response to the mounting issue of climate change, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the U.S. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost-effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial GHGs along with vehicle and engine manufacturers will report at the corporate level. An estimated 85

percent of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act

On April 23, 2009, EPA published their "Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA" (Endangerment Finding) in the *Federal Register*. The Endangerment Finding is based on Section 202(a) of the CAA, which states that the Administrator of EPA should regulate and develop standards for "emission[s] of air pollution from any class of classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The proposed rule addresses Section 202(a) in two distinct findings. The first addresses whether or not the concentrations of the six key GHGs (i.e., CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether or not the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and to the threat of climate change.

The Administrator proposed the finding that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are very likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The Administrator also proposed the finding that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. The proposed finding cites that in 2006, motor vehicles were the second largest contributor to domestic GHG emissions (24 percent of total) behind electricity generation. Furthermore, in 2005, the U.S. was responsible for 18 percent of global GHG emissions. Therefore, GHG emissions from motor vehicles and motor vehicle engines were found to contribute to air pollution that endangers public health and welfare.

3.3.3.4.2 State Plans, Policies, Regulations, and Laws Pertaining to Atmospheric Greenhouse Gases

CARB is the agency responsible for coordination and oversight of state and local Air Pollution Control Programs in California and for implementing the CCAA.

Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of

global climate change are not yet fully understood, global climate change is underway, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Because every nation emits GHGs and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale is required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Assembly Bill 1493

Assembly Bill (AB) 1493 (Chapter 200, Statutes of 2002) (amending Health & Safety Code, Section 42823, and adding Health & Safety Code, Section 43018.5), signed by the Governor in 2002, requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, in 2004 CARB approved amendments to the California Code of Regulations (CCR) adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1) require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily for the transportation of persons), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against CARB to prevent enforcement of 13 CCR 1900 and 1961 as amended by AB 1493 and 13 CCR 1961.1 (*Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in Her Official Capacity as Executive Director of the California Air Resources Board,* et al.).

On December 12, 2007, the court found that if California receives appropriate authorization from EPA (the last remaining factor in enforcing the standard), these regulations would be consistent with and have the force of federal law, thus, rejecting the automakers' claim. This authorization to implement more stringent standards in California was requested in the form of a CAA Section 209, subsection b waiver in 2005. Since that time, EPA failed to act on granting California authorization to implement the standards. Governor Schwarzenegger and Attorney General Edmund G. Brown filed suit against EPA for the delay. In December 2007, EPA Administrator Stephen Johnson denied California's request for the waiver to implement AB 1493. Johnson cited the need for a national approach to reducing GHG emissions, the lack of a "need to meet compelling and extraordinary conditions," and the emissions reductions that would be achieved through the Energy Independence and Security Act of 2007 as the reasoning for the denial.

The State of California filed suit against EPA for its decision to deny the CAA waiver. A change in presidential administration directed EPA to reexamine its position for denial of

California's CAA waiver and for its past opposition to GHG emissions regulation. California received the waiver, notwithstanding the previous denial by EPA, on June 30, 2009.

Assembly Bill 32 (2006), California Global Warming Solutions Act

In September 2006, the governor of California signed AB 32 (Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006, which enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 requires the reduction of statewide GHG emissions to 1990 levels by 2020. This equates to an approximately 15 percent reduction compared to existing statewide GHG emission levels or a 30 percent reduction from projected 2020 "business-as-usual" emission levels. The required reduction will be accomplished through an enforceable statewide cap on GHG emissions beginning in 2012.

To effectively implement the statewide cap on GHG emissions, AB 32 directs CARB to develop and implement regulations that reduce statewide GHG emissions generated by stationary sources. Specific actions required of CARB under AB 32 include adoption of a quantified cap on GHG emissions that represent 1990 emissions levels along with disclosing how the cap was quantified, institution of a schedule to meet the emissions cap, and development of tracking, reporting, and enforcement mechanisms to ensure that the state achieves the reductions in GHG emissions needed to meet the cap.

In addition, AB 32 states that if any regulations established under AB 1493 (2002) cannot be implemented, then CARB is required to develop additional, new regulations to control GHG emissions from vehicles as part of AB 32.

AB 32 Climate Change Scoping Plan

In December 2008, CARB adopted its Climate Change Scoping Plan (Scoping Plan) (CARB 2008), which contains the main strategies California will implement to achieve reduction of approximately 169 million metric tons (MMT) of CO2e, or approximately 30 percent from the state's projected 2020 emission level of 596 MMT of CO2e under a business-as-usual scenario (this is a reduction of 42 MMT CO2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e),
- the Low-Carbon Fuel Standard (15.0 MMT CO_2e),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e), and
- a renewable portfolio standard for electricity production (21.3 MMT CO_2e).

CARB has not yet determined what amount of GHG reductions it recommends from local government operations; however, the Scoping Plan does state that land use planning and

urban growth decisions will play an important role in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions (meanwhile, CARB is also developing an additional protocol for community emissions). CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the Scoping Plan expects approximately 5.0 MMT CO_2e will be achieved associated with implementation of SB 375, which is discussed in the "Senate Bill 375 (2008)" subsection below.

Senate Bills 1078 and 107 and Executive Order S-14-08

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008 Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020.

Senate Bill 1368 (2006)

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission to establish a GHG emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) must establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the California Public Utilities Commission and CEC.

Senate Bill 97 (2007)

SB 97, signed by the Governor in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code, Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the Governor's Office of Planning and Research to prepare, develop, and transmit to the California Resources Agency by July 1, 2009 guidelines for mitigating GHG emissions or the effects of GHG emissions, as required by CEQA. The California Resources Agency is required to certify and adopt these guidelines by January 1, 2010.

This bill also removes, both retroactively and prospectively, as legitimate causes of action in litigation any claim of inadequate CEQA analysis of effects of GHG emissions associated with environmental review for projects funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B) or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1E). This provision will be repealed by provision of law on January 1, 2010. At that time, such

projects, if any remain unapproved, will no longer enjoy protection against litigation claims based on failure to adequately address issues related to GHG emissions.

Senate Bill 375 (2008)

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. As part of the alignment, SB 375 requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) which prescribes land use allocation in that MPO's Regional Transportation Plan (RTP). CARB, in consultation with MPOs, is required to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets for reducing GHG emissions. If MPOs do not meet the GHG reduction targets, transportation projects located in the MPO boundaries would not be eligible for funding programmed after January 1, 2012.

This bill also extends the minimum time period for the Regional Housing Needs Allocation cycle from 5 to 8 years for local governments located in an MPO that meets certain requirements. City or county land use policies (e.g., General Plans) are not required to be consistent with the RTP, including associated SCSs or APSs. Projects consistent with an approved SCS or APS and categorized as "transit priority projects" would receive incentives under new provisions of CEQA.

Executive Order S-3-05 (2005)

Governor Schwarzenegger signed Executive Order S-3-05 on June 1, 2005, which proclaimed California is vulnerable to the impacts of climate change. The executive order declared increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established targets for total GHG emissions, which include reducing GHG emissions to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The executive order also directed the secretary of the California Environmental Protection Agency to coordinate a multiagency effort to reduce GHG emissions to the target levels. The secretary will submit biannual reports to the governor and legislature describing progress made toward reaching the emission targets; impacts of global warming on California's resources; and mitigation and adaptation plans to combat impacts of global warming.

To comply with the executive order, the Secretary of the California Environmental Protection Agency created the California Climate Action Team, which is made up of members from various state agencies and commissions. The California Climate Action Team released its first report in March 2006, which proposed achieving the GHG emissions targets by building on voluntary actions of California businesses, actions by

local governments and communities, and continued implementation of state incentive and regulatory programs.

Executive Order S-13-08 (2008)

Governor Schwarzenegger signed Executive Order S-13-08 on November 14, 2008, which directs California to develop methods for adapting to climate change through preparation of a statewide plan. The executive order directs the Governor's Office of Planning and Research, in cooperation with the California Resources Agency, to provide land use planning guidance related to sea level rise and other climate change impacts by May 30, 2009. The order also directs the California Resources Agency to develop a state Climate Adaptation Strategy by June 30, 2009, and to convene an independent panel to complete the first California Sea Level Rise Assessment Report. This report is required to be completed by December 1, 2010, and is required to include the following four items:

1. Project the relative sea level rise specific to California by taking into account issues such as coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates.
2. Identify the range of uncertainty in selected sea level rise projections.
3. Synthesize existing information on projected sea level rise impacts to state infrastructure (e.g., roads, public facilities, beaches), natural areas, and coastal and marine ecosystems.
4. Discuss future research needs relating to sea level rise in California.

Executive Order S-1-07 (2007)

Governor Schwarzenegger signed Executive Order S-1-07 in 2007, which proclaimed the transportation sector as the main source of GHG emissions in California. The executive order proclaims the transportation sector accounts for over 40 percent of statewide GHG emissions. The executive order also establishes a goal to reduce the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020.

In particular, the executive order established a Low-Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of CEC, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the SIP for alternative fuels (State Alternative Fuels Plan adopted by CEC on December 24, 2007) and was submitted to CARB for consideration as an "early action" item under AB 32. CARB adopted the Low-Carbon Fuel Standard on April 23, 2009.

3.3.3.4.3 Local Greenhouse Gas Planning and Board Resolution No. 29-2008

On March 25, 2008, the El Dorado County Board of Supervisors adopted the "Environmental Vision for El Dorado County" (Resolution No. 29-2008). The resolution sets forth goals and calls for implementation of positive environmental changes to reduce global impact, improve air quality, reduce dependence on landfills, promote alternative energies, increase recycling,

and encourage local governments to adopt green and sustainable practices. The resolution includes the following goals pertaining to transportation, traffic, transit, planning, and construction:

Transportation, Traffic and Transit

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

Planning and Construction

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

3.3.4 Methods and Significance Criteria

3.3.4.1 Construction Emissions Methods and Significance Criteria

The following sections describe the methods and criteria used to determine whether the Project would have the potential to result in significant air pollutant emissions during construction.

3.3.4.1.1 Ozone Precursor

The EDCAQMD *Guide to Air Quality Assessment* (2002) contains a methodology for "Screening of Construction Equipment Exhaust Emissions Based on Incorporation of Mitigation Measures." Based on that screening method, ROG and NO_X emissions during construction are assumed to be less than significant if the project encompasses 12 acres or less of ground that is being worked at one time and at least one of the mitigation measures relating to such pollutants described in Section 4.4.1 of the EDCAQMD guide, or an equivalent measure, is incorporated into the Project. This screening and mitigation method was used to determine potential impacts associated with ozone precursor emissions during construction.

3.3.4.1.2 Particulate Matter Emissions

Section 4.2.3 of the *Guide to Air Quality Assessment* identifies that mass emissions of fugitive dust PM_{10} need not be quantified and may be assumed to be not significant if the project includes mitigation measures consistent with Rule 403 of the South Coast Air Quality Management District (SCAQMD). (Appendix A of the Air Quality Study prepared for the Project [KDA 2015], included as Appendix C of this Draft SEIR, is an excerpt from Appendix C-1 of the EDCAQMD guide containing the mitigation measures.) Implementing the dust control measures prescribed by SCAQMD Rule 403 would allow the Project to be below the EDCAQMD threshold of significance for construction-related particulate matter emissions. The analysis applies this method and significance threshold to fugitive dust emissions associated with both PM_{10} and $PM_{2.5}$.

3.3.4.1.3 Diesel Particulate Matter

Potential health risk associated with diesel particulate matter are determined by considering the duration of Project construction activities and potential for significant long-term exposure of the public to diesel particulate matter associated with construction activities. The EDCAQMD *Guide to Air Quality Assessment* defines screening criteria for the evaluation of potential health risk; however, because of the short duration of Project construction activities and based on review of methodology used by the County on other roadway construction projects, the screening criteria was not used for this evaluation. Long-term or excessive exposure to diesel particulate matter associated with the Project would be considered to result in a potentially significant health risk.

3.3.4.1.4 Naturally Occurring Asbestos

El Dorado County has not established a quantitative significance threshold for NOA. If a project is located within one of the four areas illustrated on the El Dorado County *Asbestos Review Areas—Western Slope* (El Dorado County 2005) map discussed in Section 3.3.2.8, above, the project is considered to have an elevated probability of containing NOA. Project construction activities within areas that may contain NOA in the absence of appropriate control measures are considered a potentially significant health risk impact. Compliance with EDCAQMD Rules 223, 223-1, and 223-2 is considered sufficient to avoid the potential for significant effects.

3.3.4.1.5 Greenhouse Gas Emissions

GHG emissions associated with construction of the Project were estimated by applying version 7.1.5.1 of the Road Construction Emissions Model (SMAQMD 2015). Project-specific information (e.g., the linear and spatial size of the Project, and the anticipated schedule for construction of the Project) were used in the Road Construction Emissions Model. The calculation of CO_2e emissions is based on weighting factors applied to CO_2, methane, and nitrous oxide emissions. Weighting factors used in the analysis are based on data provided by the EPA (EPA 2015).

The EDCAQMD participated in a joint process with other air districts in the region, including the SMAQMD, to develop CEQA significance thresholds for GHG emissions. The board of directors of the SMAQMD adopted the GHG thresholds in October 2014

(SMAQMD 2015), and the GHG emissions significance thresholds adopted by the SMAQMD are used for the Project GHG impact analysis. Based on those thresholds, Project-related GHG emissions are considered significant if predicted to exceed 1,100 metric tons per year.

3.3.4.2 Operational Emissions Impact Assessment Methods and Significance Thresholds

Once constructed, the Project would serve as an additional route option for regional vehicles and would result in changes in vehicle travel patterns. The analysis assumes that additional motor vehicle trips would occur under conditions with the Project resulting from development of the Silver Springs residential subdivision project Units II and III, which cannot be developed until completion of the Silver Springs Parkway connection between Bass Lake Road and Green Valley Road. The additional route option and the additional trips under conditions with the Project would result in changing regional vehicle miles traveled (VMT) under existing conditions (year 2010 for this analysis) and future conditions (year 2035 for this analysis) as compared to existing and future (2035) conditions without the Project. The estimated change in VMT was determined through the Project Traffic Study discussed in more detail in Section 3.11 of this Draft SEIR. The change in VMT was then used to determine potential air quality impacts associated with the change in predicted motor vehicle emissions of ozone precursors and GHGs. Potential impacts associated with CO emissions were also evaluated under Project operations. The evaluation methods for each of these considerations are discussed below.

3.3.4.2.1 Ozone Precursor Emissions

The Project-related change in ozone precursor emissions under existing and future conditions was estimated using the EMFAC2014 mobile source emissions model (CARB 2014). The Project-related change in VMT was entered into the EMFAC2014 model to estimate regional emissions with and without the Project. The difference in emissions estimates is considered the net change in emissions due to the Project. The net change in emissions was calculated for "existing conditions" (year 2010 for this analysis) and future conditions (year 2035 for this analysis). Based on the EDCAQMD *Guide to Air Quality Assessment*, operational ozone precursor emissions (ROG and NO_X) are considered significant if implementation of the Project would generate emissions exceeding the amounts listed below:

- 82 pounds per day of ROG or
- 82 pounds per day of NO_X.

3.3.4.2.2 Greenhouse Gas Emissions

The Project-related change in GHG emissions under existing and future (2035) conditions was estimated using the EMFAC2014 mobile source emissions model (CARB 2014). The Project-related change in VMT was entered into the EMFAC2014 model to estimate regional emissions with and without the Project. The difference in emissions estimates is considered to be the net change in emissions due to the Project. The net change in emissions was calculated for "existing conditions" (year 2010 for this analysis) and future conditions (year 2035 for this analysis). Based on the GHG emissions significance thresholds adopted by the

SMAQMD (see Section 3.3.4.1.5, above), Project-related GHG emissions are considered significant if predicted to exceed 1,100 metric tons per year.

3.3.4.2.3 Carbon Monoxide

CO impacts were considered for potential excessive concentrations associated with traffic congestion based on relevant criteria of Section 4.7.4 of the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) (University of California, Davis 1996). The Project would have the potential to result in a significant impact associated with CO emissions if it would cause an intersection that would otherwise operate at level of service (LOS) D or better to operate at LOS E or F or if implementing the Project would result in an increase in traffic volumes in excess of 5 percent at an intersection operating at LOS E or F.

3.3.5 Impacts and Mitigation Measures

Impact 3.3-1: Emissions of ozone precursors during construction. (Potentially Significant)

Project construction equipment and vehicles would generate ozone precursor emissions (NO_X and ROG). The EDCAQMD *Guide to Air Quality Assessment* establishes screening criteria for determining whether construction-period ozone precursor emissions could result in a significant impact. The screening criteria are based on the amount of active ground disturbance at any one time and implementation of emission reduction measures. If the amount of active disturbance is less than 12 acres and if specific NO_X and ROG reduction measures are implemented as specified in the EDCAQMD guide, impacts associated with ozone precursors are considered less than significant. As discussed in Section 2.3, the area of active soil disturbance on any one day associated with the Project is estimated to be approximately 7.8 acres, and less than the 12-acre screening criteria. In the absence of mitigation implementation, the Project impact associated with ozone precursor emissions is considered potentially significant. Mitigation Measure 3.3-1, below, requires implementation of one of the three measures identified in EDCAQMD guide. Implementation of Mitigation Measure 3.3-1 would reduce the impact associated with ozone precursor emissions during Project construction to less than significant. The construction contract special provisions will address air quality requirements for the Project during construction, including incorporation of any specific requirements pursuant to mitigation measures adopted during the environmental review process.

Mitigation Measure 3.3-1. ***The County shall require that the construction contractor implement at least one of the three potential ozone precursor reduction measures as identified in the EDCAQMD Guide to Air Quality Assessment.***

The County shall require that the construction contractor implement at least one of the following three potential ozone precursor reduction measures as identified in the EDCAQMD Guide to Air Quality Assessment:

a) Require the prime contractor to provide an approved plan demonstrating that heavy-duty (i.e., greater than 50 horsepower) off-road vehicles to be used in the construction project, and operated by either the prime contractor or any

subcontractor, will achieve, at a minimum, a fleet-averaged 15 percent NO_X reduction compared to the most recent CARB fleet average. Successful implementation of this measure requires the prime contractor to submit a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used a total of 40 or more hours during the construction project. Usually the inventory includes the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. In addition, the inventory list is updated and submitted monthly throughout the duration the construction activity.

b) Obligate the prime contractor to use an alternative fuel, other than diesel, verified by CARB or otherwise documented through emissions testing to have the greatest NO_X and PM_{10} reduction benefit available, provided each pollutant is reduced by at least 15 percent.

c) *Obligate the prime contractor to use aqueous emulsified fuel verified by CARB or otherwise documented through emissions testing to have the greatest NO_X and PM_{10} reduction benefit available, provided each pollutant is reduced by at least 15 percent.*

Significance with Mitigation: Less than Significant

Impact 3.3-2: Emissions of fugitive dust and particulate matter during construction. (Potentially Significant)

Project construction activities would generate fugitive dust (including PM_{10} and $PM_{2.5}$) emissions. Based on procedures presented in the EDCAQMD *Guide to Air Quality Assessment*, fugitive dust emissions associated with Project construction can be assumed to be less than significant if the Project includes mitigation measures in compliance with Rule 403 of the SCAQMD. The Project Air Quality Study, which is included as Appendix C of this DSEIR, contains an excerpt (see Air Quality Study Appendix A) from the EDCAQMD guide that lists the relevant requirements of SCAQMD Rule 403. Implementing these dust control measures would result in a less-than-significant impact related to construction-related particulate matter emissions for both PM_{10} and $PM_{2.5}$. In the absence of implementation of these measures, this impact is considered potentially significant. Mitigation Measure 3.3-2 requirements implementation of the relevant measures as listed in the EDCAQMD Guide Appendix C-1. Implementation of Mitigation Measure 3.3-2 would reduce this impact to less than significant. (Note that the Project would also be required to comply with EDCAQMD Rules 223, 223-1, and 223-2, which also contain fugitive dust control requirements and may be determined by the County as sufficient to reduce fugitive dust particulate matter emissions to less than significant.) The construction contract special provisions will address air quality requirements for the Project during construction, including incorporation of any specific requirements pursuant to mitigation measures adopted during the environmental review process.

Mitigation Measure 3.3-2. ***The County shall require that the construction contractor implement applicable best available fugitive dust control measures as specified in the EDCAQMD Guide to Air Quality Assessment.***

The County shall require that the construction contractor implement applicable best available fugitive dust control measures contained in Appendix C-1 of the EDCAQMD Guide to Air Quality Assessment.

Significance with Mitigation: Less than Significant

Impact 3.3-3: Emissions of diesel particulate matter during construction. (Less than Significant)

Project construction vehicle and equipment operation would generate diesel particulate matter (DPM). DPM is considered a toxic air contaminant (TAC), and exposure to DPM can lead to adverse health effects, including cancer. DPM emissions associated with Project construction would be short term, occurring periodically during periods of less than 1 year. Accepted evaluation methods for determining health risk from DPM considers exposure over a 70-year period. Considering the limited duration of construction emissions, exposure to DPM can be reasonably anticipated to result in no potential for a significant health risk to the public. Furthermore, implementation of mitigation measures identified in this air quality analysis for reducing NO_X, ROG, and GHG emissions would reduce construction-related DPM emissions, further reducing the potential for adverse health impacts. This impact is therefore considered to be less than significant.

Impact 3.3-4: Potential emissions of naturally occurring asbestos (NOA) during construction. (Potentially Significant)

Soil disturbance during construction in areas containing NOA would result in an elevated risk of entraining/releasing asbestos into the air and human exposure to inhalation. Review of the El Dorado County *Asbestos Review Areas—Western Slope* (El Dorado County 2005) identifies that the Project site is located in an area "More Likely to Contain Asbestos," which indicates an elevated risk of the presence of NOA. Although sampling soil at the Project site has not been conducted to confirm the presence of NOA, this analysis determines that a potential exists for NOA to be present and considers the potential for release and human exposure to NOA during construction activities to be a potentially significant impact. Compliance with EDCAQMD Rules 223, 223-1, and Rule 223-2 would reduce this impact to less than significant. Note that Project construction activities would also be required to comply with CARB Airborne Toxic Control Measure (ATCM) 93105, "Asbestos ATCM for Construction, Grading, Quarrying, and Surface Ming Operations" and CARB ATCM 93106, "Asbestos ATCM for Surfacing Applications.") Although the Project would be required to comply with Rules 223, 223-1, and 223-2 regardless of whether these rules are specified as Project mitigation, Mitigation Measure 3.3-4 is identified in this Draft SEIR to ensure compliance with these rules and to provide a mechanism for monitoring and reporting compliance. Compliance with Rules 223, 223-1, and 223-2 through implementation of Mitigation Measure 3.3-4 would reduce this impact to less than significant.

Mitigation Measure 3.3-4: Project construction activities shall comply with El Dorado AQMD Rules 223, 223-1, and 223-2.

Project construction shall comply with the following measures, which are consistent with and implement the requirements of EDCAQMD Rules 223, 223-1, and 223-2.

a) The County shall require construction contractors to comply with EDCAQMD Rules 223, 223-1, and 223-2. Compliance shall include, but is not limited to, implementation of the following measures:

- *Apply water hygroscopic materials, or nontoxic chemical stabilizers or other specified covering on material stockpiles, wrecking activity, excavation, graded areas, swept areas, or cleared land.*
- *Install and use hoods, fans, and filters to enclose, collect, and clean the emissions of dusty materials.*
- *Cover or wet exposed soils at all times when contained in open-bodied trucks, trailers or other vehicles transporting materials;*
- *Apply asphalt, oil, water, or suitable chemicals on dirt roads.*
- *Alternate means of fugitive dust control may be used as approved by the Air Pollution Control Officer.*
- *Pursuant to Rule 223, a person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area, such that the presence of such fugitive dust remains visible, or exceed shades darker than designated as No. 0 on the Ringelmann Chart, or exceed 0% opacity as determined in accordance with EPA Method 9, in the atmosphere beyond the boundary line of the emission source.*

b) Pursuant to EDCAQMD Rule 223-1, the County's Project construction manager shall submit a Fugitive Dust Control Plan to the Air Pollution Control Officer prior to the start of construction activities. Construction activities shall not begin until the Air Pollution Control Officer has approved or conditionally approved the Fugitive Dust Control Plan. The County's Project construction manager shall provide written notification to the Air Pollution Control Officer at least 10 days prior to the initial commencement of earthmoving activities via fax, e-mail, or mail.

The Fugitive Dust Control Plan shall describe all fugitive dust control measures to be implemented before, during, and after any dust-generating activity. The Fugitive Dust Control Plan shall contain all the information described in Section 223-1.5.B of EDCAQMD Rule 223-1. The Air Pollution Control Officer shall approve, disapprove, or conditionally approve the Fugitive Dust Control Plan within 30 days of plan submittal. Rule 223-1 requires that visible emissions shall not exceed the shade designated as No. 0 on the Ringelmann Chart, or 0% opacity as determined in accordance with EPA Method 9, at 50 feet from the point of origin and at the Project area boundary. Visible emissions shall not exceed the shade designated as No. 1 on the Ringelmann Chart, or 20% opacity as determined in accordance with EPA Method 9 at the point of origin. The

construction contractor shall retain a copy of the approved Fugitive Dust Control Plan at the Project site. The approved Fugitive Dust Control Plan shall remain valid until the termination of all dust-generating activities associated with Project construction.

c) *Pursuant to EDCAQMD Rule 223-2, the County's Project construction manager shall submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity. Construction activities shall not begin until the Air Pollution Control Officer has approved or conditionally approved the Asbestos Dust Mitigation Plan. The County construction manager shall provide written notification to the Air Pollution Control Officer at least 10 days prior to the commencement of earthmoving activities via fax, e-mail, or mail.*

   The Asbestos Dust Mitigation Plan shall describe all dust mitigation measures to be implemented before, during, and after any dust-generating activity. The Asbestos Dust Mitigation Plan shall contain all the information described in Section 223-2.5.B of Rule 223-2. The Air Pollution Control Officer shall approve, disapprove, or conditionally approve the Asbestos Dust Mitigation Plan within 30 days of plan submittal.

   Pursuant to Rule 223-2, visible emissions shall not exceed the shade designated as No. 0 on the Ringelmann Chart, or 0% opacity as determined in accordance with EPA Method 9, at 25 feet from the point of origin and at the Project area boundary. Visible emissions shall not exceed the shade designated as No. 1 on the Ringelmann Chart, or 20% opacity as determined in accordance with EPA Method 9 at the point of origin. The construction contractor shall retain a copy of an approved Asbestos Dust Mitigation Plan at the Project site. The approved Asbestos Dust Mitigation Plan shall remain valid until the termination of all dust generating activities.

Significance with Mitigation: Less than Significant

Impact 3.3-5: Operational motor vehicle ozone precursor emissions. (Less than Significant)

Once constructed, the Project would serve as an additional route option for regional vehicles and would result in changes in vehicle travel patterns. In addition, and as discussed in Section 3.3.4.2 above, the analysis of operational impacts associated with the Project assumes that additional motor vehicle trips would occur under conditions with the Project resulting from development of the Silver Springs residential subdivision project Units II and III, which cannot be developed until completion of the Silver Springs Parkway connection between Bass Lake Road and Green Valley Road. The additional route option and the additional trips associated with the Silver Springs residential development project under conditions with the Project would result in a change in daily VMT under existing conditions (year 2010 for this analysis) and future conditions (year 2035 for this analysis) compared to existing and future (2035) conditions without the Project. The estimated change in daily VMT was determined through the Project Traffic Study discussed in more detail in Section 3.11 of this Draft SEIR. The change in daily VMT was then used to determine potential change in predicted daily emissions of ozone precursors from motor vehicles.

Motor vehicle emissions of ROG and NO_X would occur under conditions both with and without the Project as a result of regional travel not associated with the Project. Changes in traffic operations and regional daily VMT as a result of the Project would result in a net change in daily ozone precursor emissions from motor vehicles. The Project is predicted to result in a reduction in daily VMT under both existing and future (2035) conditions. As shown in Table 3.3-8, "Operational Ozone Precursor Emissions", the Project is predicted to result in a small net reduction in daily ozone precursor emissions compared to conditions without the Project. Therefore, the Project impact associated with operational ozone precursor emissions is considered less than significant.

Table 3.3-8. Operational Ozone Precursor Emissions

Scenario	Reactive Organic Gases		Nitrogen Oxides	
	Tons per Day	***Pounds per Day***	***Tons per Day***	***Pounds per Day***
Existing Conditions without the Project	5.8329	11,666	11.2187	22,437
Existing Conditions with the Project	5.8275	11,655	11.2094	22,419
Project-Related Change under Existing Conditions	**-0.0054**	**-11**	**-0.0093**	**-19**
Future (2035) Conditions without the Project	1.9297	3,859	1.9735	3,947
Future (2035) Conditions with the Project	1.9282	3,856	1.9721	3,944
Project-Related Change under Future (2035) Conditions	**-0.0015**	**-3**	**-0.0014**	**-3**

Source: KDA 2015, based on EMFAC2014 mobile source emissions model.

Impact 3.3-6: Carbon monoxide concentrations at study area intersections. (Less than Significant)

Changes in traffic operations at study area intersections would create the potential for increased carbon monoxide concentrations. As discussed in Section 3.3.4.2.3, above, the Project would have the potential to result in a significant impact associated with CO emissions if it would cause an intersection that would otherwise operate at LOS D or better to operate as LOS E or F or if it would result in an increase in traffic volumes in excess of 5 percent at an intersection operating at LOS E or F.

Existing Conditions Without and With the Project

Under existing conditions both without and with the Project, the Project Traffic Study (Fehr & Peers 2014) predicts that nine of the 10 study intersections would operate at LOS D or better during both the a.m. and p.m. peak hours. As a result, the Project would not create a potential for a significant impact associated with CO concentrations at these nine study area intersections. One intersection, Green Valley Road/El Dorado Hills Boulevard is predicted to operate at LOS E during the a.m. peak hour and LOS D during the p.m. peak hour under existing conditions both without and with the Project. (See Section 3.11 for additional discussion of traffic operations at this intersection.) Under existing

conditions in the a.m. peak hour, the approach volume at this intersection is predicted to be 1,809 vehicles without the Project and 1,824 vehicles with the Project, resulting in a Project-related increase of 0.83 percent. This increase is less than the 5 percent increase that would indicate a potential impact associated with CO concentrations. Therefore, the Project would have a less-than-significant impact associated with CO concentrations under existing conditions.

Future (2035) Conditions Without and With the Project

Under future (2035) conditions both without and with the Project, the Project Traffic Study (Fehr & Peers 2014) predicts that seven of the 10 study intersections would operate at LOS D or better during both the a.m. peak hour and p.m. peak hour. As a result, the Project would not create a potential for a significant impact associated with CO concentrations at these seven study area intersections. Potential impacts associated with the three other intersections are discussed below.

Green Valley Road/Deer Valley Road Intersection. The Traffic Study predicts that the unsignalized intersection of Green Valley Road and Deer Valley Road would operate at LOS E during the a.m. peak hour and LOS F during the p.m. peak hour under future (2035) conditions both without and with the Project. During the a.m. peak hour, the approach volume at this intersection is predicted to be 1,440 vehicles without the Project and 1,495 vehicles with the Project, resulting in a Project-related increase of 3.82 percent. During the p.m. peak hour, the approach volume at this intersection is predicted to be 1,750 vehicles without the Project and 1,820 vehicles with the Project, resulting in a Project-related increase of 4.00 percent. The 4.00 percent increase would be less than a 5 percent increase. These predicted increases are less than the 5 percent increase that would indicate a potential impact associated with CO concentrations. Therefore, the Project would have a less-than-significant impact associated with CO concentrations under future (2035) conditions at this intersection.

Green Valley Road/Bass Lake Road. The Traffic Study predicts that the intersection of Green Valley Road/Bass Lake Road would operate at LOS F during the a.m. peak hour under future conditions both without and with the Project. During the a.m. peak hour, the approach volume at this intersection is predicted to be 2,205 vehicles without the Project and 2,055 vehicles with the Project, resulting in a Project-related decrease in traffic volumes at this location. This predicted decrease indicates that the Project would not result in an adverse impact associated with CO concentrations and the impact at this location is considered less than significant.

Green Valley Road/Cambridge Road Intersection. The Traffic Study predicts that the intersection of Green Valley Road and Cambridge Road would operate at LOS F during the a.m. peak hour and LOS D during the p.m. peak hour under future (2035) conditions both without and with the Project. During the a.m. peak hour, the approach volume at this intersection is predicted to be 1,935 vehicles both without and with the Project. Because the Project would not change the traffic volumes at this intersection under a.m. peak hour conditions, the Project would have a less-than-

significant impact associated with CO concentrations under future (2035) conditions at this intersection.

As a result of the analysis presented above, the Project impact associated with potential increases in CO concentrations at study area intersections is considered less than significant.

Impact 3.3-7: Short-term and long-term emissions of GHGs. (Less than Significant)

Project construction activities would involve operation of fossil fuel–powered equipment and vehicles that would result in emissions of GHGs during the construction period. Based on the methods described above in Section 3.3.4.2.2, and as shown in Table 3.3-9, "Construction-Related GHG Emissions," GHG emissions associated with construction of the Project are estimated to be 1,313 metric tons of CO_2e. This amount of construction-related GHG emissions would exceed the 1,100 metric tons per year significance threshold and without consideration of long-term GHG reductions that would result from the project, would be considered significant. However, once constructed, the Project would serve as an additional regional vehicle route option and would result in changes in vehicle travel patterns, reduced daily vehicle miles traveled (VMT), and reduced GHG emissions associated with long-term regional vehicle emissions.

Table 3.3-9. Construction-Related GHG Emissions

Scenario	Carbon Dioxide	Methane	Nitrous Oxide	Total Carbon Dioxide Equivalent
Construction Emissions	1,186.50	0.06	0.42	**1,313.32**

Source: KDA 2015.
Note: All values are in metric tons per year.

As discussed in Section 3.3.4.2 above, the analysis of operational impacts associated with the Project assumes that additional motor vehicle trips would occur under conditions with the Project resulting from development of the Silver Springs residential subdivision project Units II and III, which cannot be developed until completion of the Silver Springs Parkway connection between Bass Lake Road and Green Valley Road. The additional route option provided by the Project and the additional trips associated with the Silver Springs residential development project under conditions with the Project would result in a change in daily VMT under existing conditions (year 2010 for this analysis) and future conditions (year 2035 for this analysis) as compared to existing and future (2035) conditions without the Project. The estimated change in daily VMT was determined through the Project Traffic Study discussed in more detail in Section 3.11 of this Draft SEIR. The change in daily VMT was then used to determine potential change in predicted daily motor vehicle emissions of GHG.

Motor vehicle emissions of GHG would occur under conditions both with and without the Project as a result of regional travel not associated with the Project. Changes in traffic operations and regional daily VMT as a result of the Project would result in a net change in

daily GHG emissions from motor vehicles. The Project is predicted to result in a reduction in daily VMT under both existing and future (2035) conditions. As shown in Table 3.3-10, "Annual Operational GHG Emissions," the Project is predicted to result in a net reduction in daily GHG emissions compared to conditions without the Project.

Table 3.3-10. Annual Operational GHG Emissions

Scenario	Carbon Dioxide	Methane	Nitrous Oxide	Carbon Dioxide Equivalent
Existing Conditions without the Project	1,787,716.92	135.36	154.53	1,837,152.22
Existing Conditions with the Project	1,785,651.35	135.24	154.41	1,835,045.27
Project-Related Change under Existing Conditions	**-2,065.57**	**-0.13**	**-0.13**	**-2,106.95**
Future (2035) Conditions without the Project	1,321,596.80	29.56	27.18	1,330,436.82
Future (2035) Conditions with the Project	1,320,519.36	29.54	27.17	1,329,353.05
Project-Related Change under Future (2035) Conditions	**-1,077.44**	**-0.02**	**-0.02**	**-1,083.77**

Source: KDA 2015.
Note: All values are in metric tons per year.

As discussed, GHG emissions associated with construction of the Project are estimated to be 1,313 metric tons of CO2e. Once the Silver Springs Parkway is completed and provides a connection between Bass Lake Road and Green Valley Road available for public use, annual motor vehicle GHG emissions would be reduced compared to conditions without the Project. As shown in Table 3.3-10, the annual reduction during just the first year once the Project segment is open for vehicle traffic is 2,106 metric tons of CO2e, more than offsetting the 1,313 metric tons of construction-related GHG emissions. The magnitude of the annual reduction in emissions compared to conditions without the Project would reduce over time. However, the long-term emissions of GHG associated with regional motor vehicle travel under conditions with the Project would be less than long-term emissions associated with regional vehicle travel under conditions without the Project. As a result of the net reduction in GHG emissions when both construction and long-term GHG emissions are considered, the impact associated with GHG emissions is considered less than significant.

Although no mitigation is required for this less-than-significant impact, construction-related GHG emissions could be reduced by implementing one or more of measures identified in Mitigation Measure 3.3-7, below. The actual emission reduction that would be achieved through implementation of the measures included in Mitigation Measure 3.3-7 cannot, and need not, be calculated for this analysis. Mitigation

Measure 3.3-5. GHG emission reduction measures shall be implemented to the extent feasible during Project construction.

The County shall require implementation of the following GHG reduction measures to the extent feasible during Project construction activities:

a) On-site equipment and vehicles shall be shut off when not in use and idling shall be avoided or limited to the greatest extent practicable. Idling durations shall not exceed 5 minutes.

b) All construction equipment shall be maintained in proper working condition according to manufacturer's specifications. Equipment shall be checked by a certified mechanic and determined to be running in proper condition before equipment is operated. Construction contractors shall maintain records of equipment maintenance throughout the construction period.

c) The prime contractor shall provide an approved construction emissions control plan demonstrating that heavy-duty (i.e., greater than 50 horsepower) off-road vehicles to be used in the construction Project, and operated by either the prime contractor or any subcontractor, will achieve the maximum feasible fleet-averaged GHG emission reductions. Successful implementation of this measure requires the prime contractor to submit a Construction Emissions Control Plan that includes a comprehensive inventory of all off-road construction equipment equal to or greater than 50 horsepower having the potential to be used a total of 40 or more hours during construction. The inventory shall include horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly to the County's construction manager throughout the construction period. Options that shall be considered for reducing emissions include, but are not limited to, use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

d) The County shall obligate the prime contractor to use an aqueous-emulsified fuel or other alternative fuel (other than diesel) verified by CARB or otherwise documented through emissions testing to have the greatest GHG reduction benefit feasibly available.

e) To the extent feasible, all construction vehicles and equipment shall comply with Tier 3 or better emission control standards.

Significance with Mitigation: Less than significant

3.4 Biological Resources

This section describes existing biological resources and evaluates potential effects on these resources that may result from construction of the proposed Project. Resources evaluated include potentially occurring special-status species; wildlife habitats; vegetation communities; and waters of the United States, including wetlands. In addition to reviewing previously prepared environmental documents, this analysis is based on the results of recent field surveys, literature searches, and database queries. Much of the information contained in this section is based on the *Biological Resources Evaluation, Silver Springs Parkway to Bass Lake Road (South Segment) Project* (Foothill Associates 2015) prepared for the Project and included as Appendix D-1 of this Draft SEIR.

3.4.1 Summary of the 1992 Bass Lake Road Realignment EIR Biological Resources Evaluation

The 1992 Bass Lake Road Realignment EIR evaluated impacts to biological resources, including oak trees, wetlands, and water quality. The EIR noted that approximately 330 oak trees would be removed from the current Project study area (the study area for the 1992 EIR extended north to Green Valley Road). The removal of trees in oak woodlands was not considered significant because of the number of trees affected and because some of the trees were in poor condition. While the loss of oak trees in the riparian corridor was considered significant, it was determined that the impacts from a loss of trees in the riparian area could be reduced to less-than-significant levels by re-creating a riparian corridor at the south end of the realignment area. The following mitigation measures were identified in the 1992 EIR for impacts to oak trees:

1992 EIR Mitigation Measure F-1: *No vehicles, construction equipment, mobile offices or materials shall be parked or located within the driplines of oaks which are not within the realignment right-of-way.*

1992 EIR Mitigation Measure F-2: *Oak trees not removed along the realignment route shall be fenced to protect them from damage. The fencing shall be placed beneath the driplines of the trees.*

1992 EIR Mitigation Measure F-3: *Grade changes within the driplines of oak trees should be avoided. However, if grade changes must be made within the driplines of oak trees, the roots must be cleanly pruned back within 1 to 2 inches of the soil level.*

1992 EIR Mitigation Measure F-4: *Trenching within the driplines of oak trees should be avoided. If trenching must be done, then the utilities should be placed in a conduit which is bored or tunneled though the soil.*

1992 EIR Mitigation Measure F-5: *Replace native oaks that are removed with a like kind and species in the general vicinity of the removed trees. Replacement rate goal of 5 to 1 is recommended. This measure should be coordinated with adjacent property owners so that the replaced oaks are not likely to be removed during subsequent development of these areas.*

1992 EIR Mitigation Measure F-6: *Implement mitigation measures G-1 through G-5 which are designed to protect wetland areas.*

The 1992 EIR also identified potential impacts associated with two intermittent creeks and a pond and considered the loss of more than 1 acre of wetlands a significant impact. Impacts to the pond were determined to be less than significant because of its size, fluctuating water levels, condition, and the presence of similar habitat nearby. Impacts to wetlands along the realignment route were considered significant, but the analysis determined that the impact could be reduced to less than significant by implementing three mitigation measures identified in the 1992 EIR (Mitigation Measures G-1, G-2, and G-3). Following certification of the 1992 EIR and approval of the realignment project, a Nationwide Permit was authorized by the U.S. Army Corps of Engineers (USACE) on August 18, 1999. Part of the mitigation required by USACE included purchase of 0.75 acre of marsh credits at an approved mitigation bank. This mitigation was not consistent with the mitigation contained in the certified 1992 EIR, which required the on-site reconstruction of a pond affected by the project. To rectify this inconsistency, the County prepared and approved an addendum to the 1992 EIR in 2001. The *Addendum to Final Environmental Impact Report Bass Lake Road Realignment* (El Dorado County 2001) combined and modified 1992 EIR Mitigation Measures G-1, G-2, and G-3 into the following mitigation measure:

2001 Addendum Mitigation Measure G-1: *To protect wetlands and streambeds, an Army Corps of Engineers (COE) Nationwide 26 Permit and a Department of Fish and Game (DFG) Section 1600 Streambed Alteration Permit must be obtained prior to the commencement of major construction. To mitigate for the loss of the pond habitat, the County, to the satisfaction of the COE and DFG, shall do one of the following:*

1. *Reconstruct a new pond similar in size to the existing pond and reconstruct a new natural-appearing intermittent creek north and south of the pond. The County must hire a wetland reconstruction specialist to oversee this work; or*
2. *Purchase credits in an approved mitigation bank to compensate for the loss of wetlands at a 1:1 ratio; or*
3. *Reconstruct a new pond similar in size to the existing pond and reconstruct a new natural-appearing intermittent creek in an off-site location to be approved by the COE and DFG. The County must hire a wetland reconstruction specialist to oversee this work.*

The 1992 EIR also found that potential impacts to water quality associated with stormwater runoff carrying construction-related sediment in the short-term and transportation-related pollutants, including oil, gasoline, grease, and heavy metals in the long term, could be reduced to less than significant through implementation of the following mitigation measures:

1992 EIR Mitigation Measure G-4: *Site-specific erosion and drainage control measures shall be developed and implemented as part of future roadway construction. Measures include, but are not limited to, limiting removal of vegetation around construction areas, minimizing exposure of bare soils, replanting disturbed soils with suitable native species, controlling runoff, preventing sedimentation from entering drainages, and limiting construction to dry seasons.*

1992 EIR Mitigation Measure G-5: *Equipment fueling and chemical storage areas shall be sited away from active stream courses.*

3.4.2 Environmental Setting

This environmental setting section discusses the literature and field review conducted to determine existing site conditions and habitat and describes special-status species and habitat associated with the Project area. The study area for the biological resources assessment considers the general habitat types and potential species occurrences within the Project region, and defines habitats and potential disturbance areas within an approximately 26-acre study area that encompasses areas of potential temporary and permanent disturbance, including potential construction staging areas.

3.4.2.1 Literature Review and Field Assessment

To determine existing site conditions and the potential for special-status or other sensitive biological resources to be present within the study area, available information pertaining to the natural resources of the region was reviewed. Previous environmental documents for the site and the Silver Springs Subdivision, located immediately north of the site, were also reviewed. A complete list of references Foothill Associates reviewed for the biological resources assessment are listed in the "Reference" section of the Biological Resources Assessment (see Appendix D-1 of this Draft SEIR). Site-specific information was reviewed including:

- California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) (Buffalo Creek, Clarksville, Coloma, Folsom, Folsom SE, Latrobe, Pilot Hill, Rocklin, and Shingle Springs quadrangles), accessed June 12, 2014;
- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants (online edition, v8-01a) (Clarksville, Coloma, Folsom, Folsom SE, Latrobe, Pilot Hill, Rocklin, and Shingle Springs quadrangles), accessed June 12, 2014;
- Natural Resource Conservation Service's (NRCS's) *Soil Survey of El Dorado Area, California* (1974); and
- U.S. Fish and Wildlife Service's (USFWS's) *Federal Endangered and Threatened Species that may be affected by Projects in the Clarksville 7.5-minute series Quadrangle* (accessed June 12, 2014).

Foothill Associates' biologists conducted a field assessment of portions of the study area on June 24, 2014. Portions of the Project site are located on private property. Some property owners denied biologists access to their properties for performing environmental studies associated with the Project. Therefore, some properties were not accessed for pedestrian surveys. Observations from adjacent accessible areas and interpretation of aerial photography and other information provided sufficient information for the biological resources assessment. The publicly owned portion of the site east of the existing Bass Lake Road was systematically surveyed on foot with binoculars to ensure total search coverage, with special attention given to identifying those portions of the site with the potential for supporting special-status species and sensitive habitats. The residential properties north of Bass Lake Road were surveyed with binoculars and using available aerial photos and Google Streetview imagery. During the field surveys, biologists recorded the plant and animal species observed and characterized biological communities occurring on the Project site.

3.4.2.2 Topography and Drainage

The Project study area generally slopes downward from south to north, with drainages in the area trending northwesterly. Elevation ranges from 1,230 feet above mean sea level (amsl) in the south to 1,190 feet above amsl in the north. The study area is located within the Upper American River Watershed. Intermittent drainages were identified in the Project area in the 1992 EIR. These drainages flow northwest to Green Springs Creek, which flows to New York Creek and into Folsom Reservoir, the nearest navigable water.

Two intermittent drainages and a pond were identified in the study area in the 1992 EIR. Access limitations prevented pedestrian surveys of the pond and intermittent drainages for this assessment. Review of existing literature and aerial imagery by Foothill Associates for this Draft SEIR suggests that the pond was created by damming the intermittent drainages. All of these features are located in the riparian woodland habitat, as discussed below. For the purposes of this environmental review, the drainages and pond are assumed to be jurisdictional waters of the United States and state.

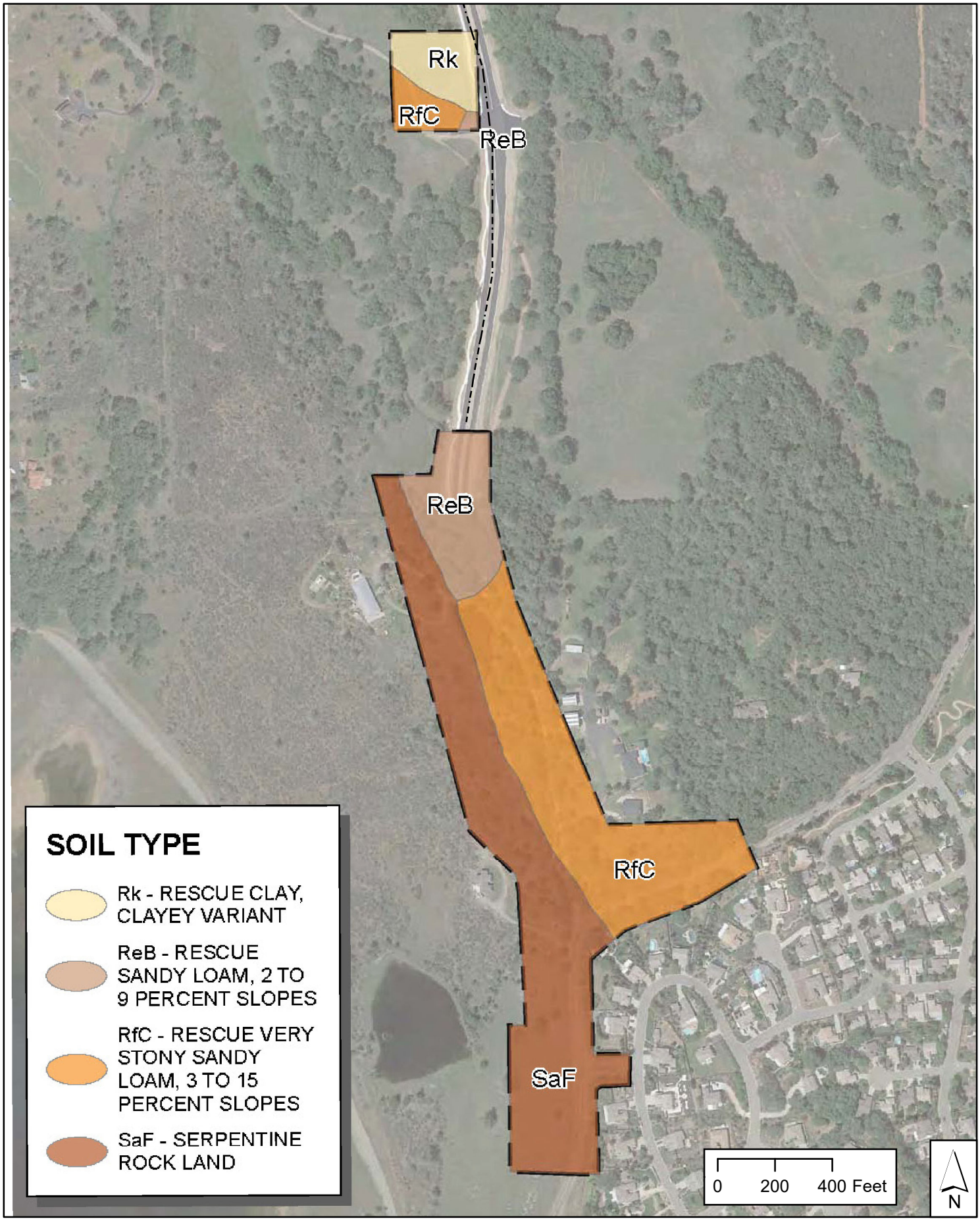
3.4.2.3 Soils

NRCS has mapped four soil units on the site (see Figure 3.4-1, "Project Area Soils Distribution"). The soil units that occur on the site include those listed below with a description of their general characteristics.

- Rescue Clay, Clayey Variant: This poorly drained soil is found between 500 and 1500 feet in elevation. It is formed by layers of clay and clay loam underlain by igneous rock at a depth of more than 40 inches. This soil is often found in wet drainageways and swales. This soil is not considered Prime Farmland. The hydric soils list for the County does not identify this soil type as hydric (NRCS 2014).
- Rescue Sandy Loam, 2 to 9 Percent Slopes: This soil is found between 800 and 2000 feet in elevation. It is a relatively deep, well-drained soil, averaging approximately 66 inches to bedrock. With irrigation, this soil is considered Prime Farmland. The hydric soils list for the County does not identify this soil type as hydric (NRCS 2014).
- Rescue Very Stony Sandy Loam, 3 to 15 Percent Slopes: This soil is similar to Rescue Sandy Loam, but typically has more stone and clay intrusions. The bedrock is slightly shallower, typically located between 55 and 50 inches below the surface. This soil is not considered Prime Farmland. The hydric soils list for the County does not identify this soil type as hydric (NRCS 2014).
- Serpentine Rock Land: Serptentine rock land is found from 600 to 4,000 feet amsl. It consists of unweathered serpentine soils with thin surface soils. The hydric soils list for the County does not identify this soil type as hydric (NRCS 2014).

3.4.2.4 Biological Communities

Six biological communities occur within the study area, including annual grassland, blue oak woodland, valley foothill riparian woodland, chaparral, pond, and developed areas, as shown on Figure 3.4-2, "Biological Communities." The two intermittent drainages that occur within the study area flow through both the valley foothill riparian and blue oak woodlands. Almost half the site comprises blue oak woodland and valley foothill riparian woodland.



SOURCE: Foothill Associates 2015
BASE MAP: Google Earth 2014

Figure 3.4-1. Project Area Soils Distribution

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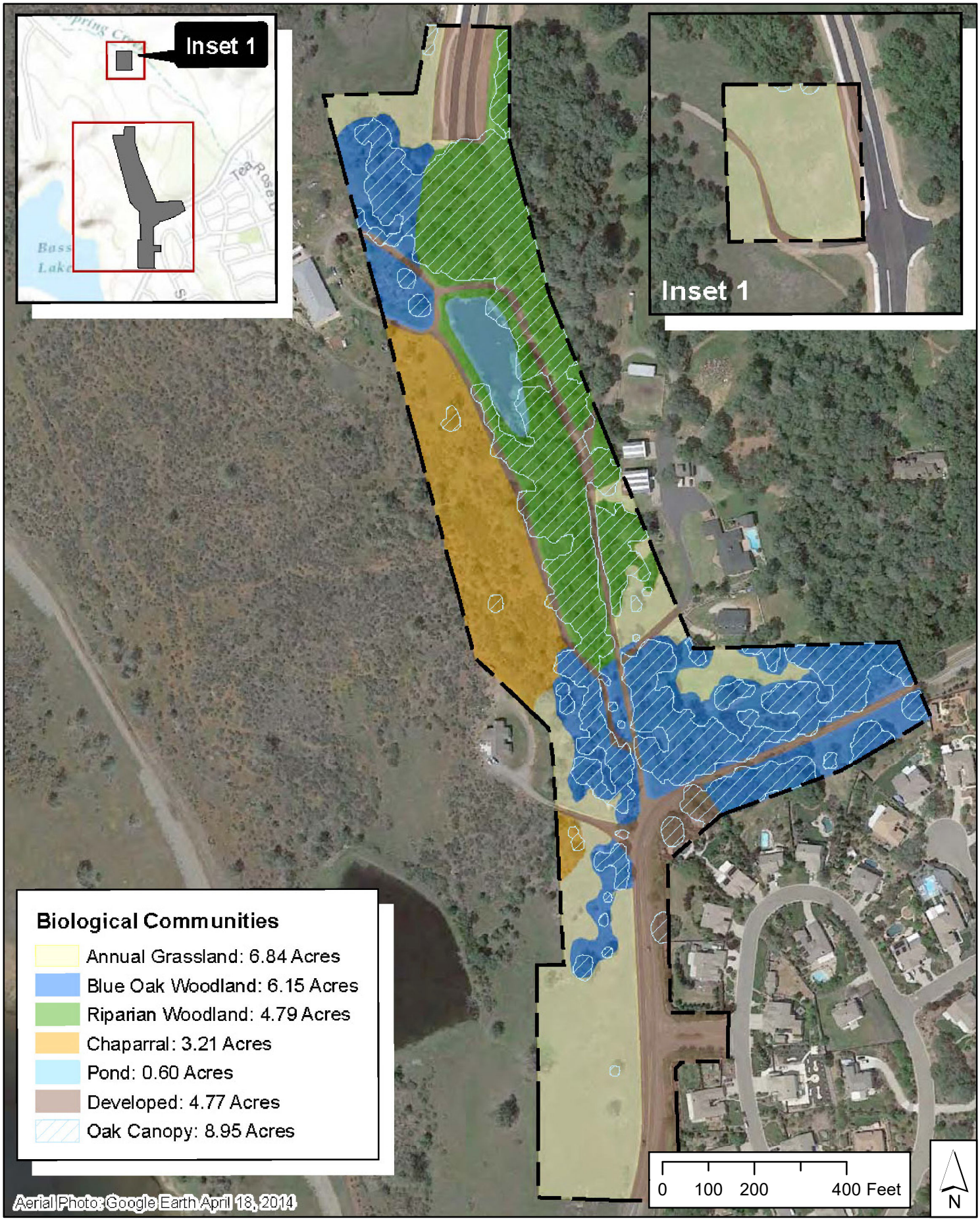

SOURCE: Foothill Associates 2015
BASE MAP: Google Earth 2014

Figure 3.4-2. Biological Communities

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These communities provide habitat for a number of common species of wildlife and may provide potentially suitable habitat for special-status species. Described in the following subsections are each of the biological communities, including associated common plant and wildlife species observed and expected to occur within these communities.

3.4.2.4.1 Annual Grassland

A total of 6.9 acres of annual grassland is found in the study area, the majority of which is in the southern half of the site. Annual grassland is characterized primarily by an assemblage of nonnative grasses and herbaceous species. These grasslands are dominated by introduced annual grasses that sprout in the fall, grow through the winter and spring, and set seed as the soil moisture declines. The annual grasslands on-site are dominated by barbed goat grass (*Aegilops triuncialis*), yellow star-thistle (*Centaurea solstitialis*), soft chess (*Bromus hordeaceus*), and mouse-tail grass (*Vulpia myuros*). Other species observed in the annual grassland include vetch (*Vicia* sp.), medusahead grass (*Elymus caput-medusae*), soaproot (*Chlorogalum* sp.), wild oat (*Avena barbata*), perennial ryegrass (*Festuca perennis*), Fitch's tarweed (*Centromadia fitchii*), and bur chervil (*Anthriscus caucalis*). Scattered blue oaks (*Quercus douglasii*) and gray pines (*Pinus sabiniana*) are located throughout the annual grassland. Small patches, typically no larger than 5 by 5 feet, of open space and bare ground are located throughout the annual grassland habitat.

Annual grassland habitat supports breeding, foraging, and shelter habitat for several species of wildlife. Wildlife observed in the annual grasslands on the Project site include western scrub jay (*Aphelocoma californica*), California ground squirrel (*Otospermophilus beecheyi*), coyote (*Canis latrans*), turkey vulture (*Cathartes aura*), and red-tailed hawk (*Buteo jamaicensis*).

3.4.2.4.2 Blue Oak Woodland

Approximately 6.2 acres of blue oak woodland is located in the northern and central areas of the study area between the annual grassland and the denser riparian woodland. The canopy is dominated by blue oaks with scattered gray pines. The understory is open annual grassland with few shrubs or small trees.

Wildlife species observed in the blue oak woodland include western scrub jay, American crow (*Corvus brachyrhynchos*), and western fence swift (*Sceloporus occidentalis*).

3.4.2.4.3 Valley Foothill Riparian Woodland

The northeast portion of the study area is dominated by 4.8 acres of valley foothill riparian woodland along the intermittent drainages and around the pond, which is discussed below. This habitat is generally dominated by valley oak (*Quercus lobata*) and interior live oak (*Quercus wislizeni*), but also includes other riparian trees such as Fremont cottonwood (*Populus fremontii*), willow (*Salix* sp.), blue oak, and gray pine. Valley foothill riparian woodland generally has a dense understory of shrubs and small trees including poison oak (*Toxicodendron diversiloba*) and Himalayan blackberry (*Rubus armeniacus*). Edible fig (*Ficus carica*) was also observed in the valley foothill riparian woodlands on-site.

Wildlife species observed in the valley foothill riparian woodlands on-site include mule deer (*Odocoileus hemionus*). Other species commonly found in this habitat include western gray squirrel (*Sciurus griseus*) and red-shouldered hawks (*Buteo lineatus*).

3.4.2.4.4 Chaparral

Approximately 3.2 acres of chaparral habitat is found along the western portion of the northern half of the study area. This habitat is dominated by dense shrubs including Manzanita (*Arctostaphylos* sp.), buckbrush (*Ceanothus cuneatus*), deerbrush (*Ceanothus integerrimus*), coffeeberry (*Frangula californica*), yerba santa (*Eriodictyon californica*), and poison oak. Small clusters of gray pines and blue oaks are scattered throughout the brush.

Wildlife species observed in the chaparral include black phoebe (*Sayornis nigricans*), ash-throated flycatcher (*Myiarchus cinerascens*), and spotted towhee (*Pipilo maculatus*).

3.4.2.4.5 Pond

An approximately 0.6-acre pond is located in the northern half of the study area, as shown on Figure 3.4-1. As documented in the 1992 EIR, this pond was created by construction of a 10-foot-high dam across a seasonal drainage and may be fed by a combination of spring inflow and irrigation runoff. A review of historic aerial photos shows that the water level in the pond fluctuates significantly over the course of a year. Depending on rainfall and the amount of irrigation runoff, the pond may dry completely in some years.

Although the pond could not be directly observed as part of the Foothill Associates field survey because of property access limitations, wildlife species observed and typical at other ponds in the region include Canada goose (*Branta canadensis*), killdeer (*Charadrius vociferus*), mallard (*Anas platyrhynchos*), and western pond turtle (*Actinemys marmorata*).

3.4.2.4.6 Developed Area

The study area includes 4.8 acres of developed areas. This includes the existing Bass Lake Road and its adjacent landscaping and landscape improvements and access roads/driveways associated with three residences. Landscape species identified in the Bass Lake Road corridor include sweetgum (*Liquidambar styraciflua*), black locust (*Robinia pseudoacacia*), ceanothus (*Ceanothus* sp.), and redbud (*Cercis occidentalis*).

3.4.2.4.7 Special-Status Species

Special-status species are plant and animal species that are afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- listed or proposed for listing under the California Endangered Species Act (CESA) or federal Endangered Species Act (ESA);
- protected under other regulations (e.g., Migratory Bird Treaty Act);
- CDFW species of special concern;
- identified as species of concern by CNPS; or

- receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDB and the online versions of the USFWS and CNPS species occurrence lists for the 7.5-minute U.S. Geological Survey Buffalo Creek, Clarksville, Coloma, Folsom, Folsom SE, Latrobe, Pilot Hill, Rocklin, and Shingle Springs topographic quadrangles. Figure 3.4-3, "CNDDB Query Results," depicts the locations of special-status species recorded in the CNDDB within 5 miles of the study area. Table 3.4-1, "Listed and Special-Status Species Potentially Occurring on or near the Site," lists the species identified through the CNDDB query and includes the common name and scientific name for each species; regulatory status (federal, state, local, CNPS); habitat descriptions; and potential for occurrence on the Project site. The following set of criteria was used to determine each species' potential for occurrence within the study area:

- Present: Species known to occur on the site, based on CNDDB records, and/or was observed on the site during the field survey(s).
- High: Species known to occur on or near the site (based on CNDDB records within 8 kilometers or 5 miles and/or based on professional expertise specific to the site or species) and suitable habitat is on the site.
- Low: Species known to occur near the site and there is marginal habitat on-site. Or the species is not known to occur near the site; however, suitable habitat is on the site.
- None: Species is not known to occur on or near the site and no suitable habitat for the species is on the site or a survey for the species was completed during the appropriate season with negative results.

Species known to be present or considered to have a potential (*high* or *low*) for occurrence are discussed in more detail in the sections that follow Table 3.4-1.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site

Common Name	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Potential for Occurrence
PLANTS			
Ahart's dwarf rush *Juncus leiospermus* var. *ahartii*	—; —; —; 1B	Found in moist areas in valley and foothill grasslands and on the edge of vernal pools. Blooms March–May	**None**; no suitable habitat for this species is on-site.
Big-scale balsamroot *Balsamorhiza macrolepis* var. *macrolepis*	—; —; —; 1B	Chaparral, cismontane woodland, valley and foothill grassland, mixed oak woodland and forest, purple needlegrass grassland, and sometimes in serpentinite soils from 300 to 5,100 feet above mean sea level (amsl). Blooms March–June.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site

Common Name	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Potential for Occurrence
Bisbee Peak rush-rose *Helianthemum suffrutescens*	—; —; —; 3	Rocky hillsides in chaparral areas between 250 and 2,200 feet. Often associated with gabbro soil types in burned or disturbed areas. Blooms April–August. Eleven CNDDB occurrences within 5 miles of the Project area.	**High**; suitable habitat is on-site and multiple occurrences within 5 miles.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	—; CE; —; 1B	Clay soils around the margins of marshes and swamps and in vernal pools.	**None**; no suitable habitat for this species is on-site.
Brandegee's clarkia *Clarkia biloba* ssp. *brandegeeae*	—; —; —; 4	Chaparral, foothill woodlands, and conifer forest, often roadcuts from 245 to 3,000 feet amsl. Usually in dry areas. Blooms May–July. Three CNDDB occurrences within 5 miles of the Project area.	**High**; suitable habitat is on-site and multiple occurrences within 5 miles.
Brewer's calandrinia *Calandrinia breweri*	—; —; —; 4	Disturbed or burned areas in chaparral or coastal scrub with sandy or loamy soils between 30 and 4,000 feet. Blooms March–June.	**Low**; there is potentially suitable habitat for this species on-site but no occurrences within 5 miles of the site.
Dwarf downigia *Downingia pusilla*	—; —; —; 2	Moist valley and foothill grasslands and vernal pools. Blooms March–May.	**None**; there is no suitable habitat for this species on-site.
El Dorado bedstraw *Galium californicum* ssp. *sierrae*	FE; CR; SLC; 1B	Open pine forests and oak woodlands between 300 and 2,000 feet; associated with gabbro soils. Blooms May–June.	**High**; there is suitable habitat on-site and 12 known occurrences within 5 miles.
El Dorado County mule ears *Wyethia reticulata*	—; — ;—; 1B	Wooded slopes and chaparral between 1000 and 1500 feet amsl. Usually associated with gabbro soils. Blooms April–August.	**High**; there is suitable habitat on-site and 23 known occurrences within 5 miles.
Fresno ceanothus *Ceanothus fresnensis*	—; —; —; 4	Openings in cismontane woodland, lower montane coniferous forest, from 3300 to 6,000 feet in elevation. Blooms May–July.	**None**; site is below known elevation range for this species.
Hernandez bluecurls *Trichostema rubisepalum*	—; —; —; 4	Gravelly volcanic or serpentine soil in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest and vernal pools, from 600 to 2,900 feet in elevation. Blooms June–August.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site

Common Name	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Potential for Occurrence
Humboldt lily *Lilium humboldtii* ssp. *humboldtii*	—; —; —; 4	Openings in chaparral and cismontane woodland and lower montane coniferous forest from 360 to 3,400 feet in elevation. Blooms May–July.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Jepson's onion *Allium jepsonii*	—; —; —; 1B	Serpentine soils in chaparral, lower montane coniferous forest, and cismontane woodland between 950 and 4,400 feet. Blooms April–August.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Jepson's woolly sunflower *Eriophyllum jepsonii*	—; —; —; 4	Chaparral, cismontane woodland, and coastal scrub between 650 and 3,400 feet. Sometimes on serpentine soils. Blooms April–June	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Layne's butterweed (=ragwort) *Packera layneae*	FT; CR; —; 1B	Dry pine woodlands, oak woodlands, or chaparral areas associated with rocky serpentine or gabbroic soils. Blooms April–August.	**High**; there is suitable habitat on-site and 23 known occurrences within 5 miles.
Legenere *Legenere limosa*	—; CT; —; 1B	Vernal pools between 0 and 2,640 feet. Blooms April–June.	**None**; there is no suitable habitat for this species on-site.
Parry's horkelia *Horkelia parryi*	—; —; —; 1B	Open chaparral and foothill woodland between 250 and 3,500 feet. Often on Ione formation soils. Blooms April–September.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Pincushion navarretia *Navarretia myersii* ssp. *myersii*	—; —; —; 1B	Vernal pools in valley grassland, between 60 and 1,100 feet. Blooms April–May.	**None**; there is no suitable habitat for this species on-site.
Pine Hill ceanothus *Ceanothus roderickii*	FE; CR; —; 1B	Serpentine or gabbroic soils in chaparral or woodland between 800 and 2,100 feet. Blooms April–June.	**High**; there is suitable habitat on-site and seven known occurrences within 5 miles.
Pine Hill flannelbush *Fremontodendron decumbens*	FE; CR; —; 1B	Chaparral and oak and pine woodlands rocky serpentine or gabbroic soils between 1,400 and 2500 feet. Blooms April–July.	**High**; there is suitable habitat on-site and seven known occurrences within 5 miles.
Red Hills soaproot *Chlorogalum grandiflorum*	—; —; —; 1B	Chaparral, woodland, and coniferous forest between 800 and 4,100 feet. Usually associated with gabbro or serpentine soils.	**High**; there is suitable habitat on-site and eight known occurrences within 5 miles.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site

Common Name	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Potential for Occurrence
Sacramento orcutt grass *Orcuttia viscida*	FE; CE; —; 1B	Deep vernal pools between 100 and 330 feet. Blooms April–September.	**None**; there is no suitable habitat for this species on-site.
Sanborn's onion *Allium sanbornii* var. *sanbornii*	—; —; —; 4	Chaparral, cismontane woodland, and coniferous forest on gravelly, usually serpentine soils from 850 to 5,000 feet elevation. Blooms May–September.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Sanford's arrowhead *Sagittaria sanfordii*	—; —; —; 1B	Freshwater marsh, swamps, and similar quiet shallow freshwater areas between 0 and 2,150 feet. Blooms May–October.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Slender orcutt grass *Orcuttia tenuis*	FT; CE; —; 1B	Vernal pools, often with gravelly substrate, between 120 and 5,800 feet. Blooms May–October.	**None**; there is no suitable habitat for this species on-site.
Starved daisy *Erigeron miser*	—; —; —; 1B	Rocky ground in upper montane coniferous forest from 6,000 to 8,650 feet in elevation. Blooms June–October.	**None**; site is below known elevation range for this species.
Stebbins' morning glory *Calystegia stebbinsii*	FE; CE; —; 1B	Serpentine or gabbroic soils in cismontane woodlands and openings in chaparral between 600 and 3,600 feet. Blooms April–July. .	**High**; there is suitable habitat on-site and seven known occurrences within 5 miles.
Streambank spring beauty *Claytonia parviflora* ssp. *brandegeeae*	—; —; —; 4	Rocky outcrops in cismontane woodland between 825 and 4,000 feet. Blooms February–May.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Tuolumne button-celery *Eryngium pinnatisectum*	—; —; —; 1B	Wet areas in cismontane woodland and lower montane coniferous forest; and vernal pools between 230 and 3,020 feet. Blooms May–August.	**None**; there is no suitable habitat for this species on-site.
WILDLIFE—INVERTEBRATES			
Alabaster Cave harvestman *Banksula californica*	—; CSC; —; —	Caves. Only found in Alabaster cave.	**None**; there is no suitable habitat for this species on-site.
Blennosperma vernal pool andrenid bee *Andrena blennospermatis*	—; CSC; —; —	Upland habitat near vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site. One CNDDB occurrence within 5 miles of the Project area.
California linderiella *Linderiella occidentalis*	—; CSC; —; —	Vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site			
Common Name	**Regulatory Status (Federal; State; Local; CNPS)**	**Habitat Requirements**	**Potential for Occurrence**
Cosumnes spring stonefly *Cosumnoperla hypocrena*	—; CSC; —; —	Freshwater intermittent streams in the American and Cosumnes River basins.	**Low**; potential suitable habitat in riparian areas, but no known occurrences within 5 miles.
Hairy water flea *Dumontia oregonensis*	—; CSC; —; —	Vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site.
Midvalley fairy shrimp *Branchinecta mesovallensis*	—; CSC; —; —	Vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site.
Ricksecker's water scavenger beetle *Hydrochara rickseckeri*	—; CSC; —; —	Vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT; —; —; —	Blue elderberry shrubs usually associated with riparian areas.	**Low**; no elderberry shrubs were observed on-site, but shrubs may be present in riparian area.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT; —; —; —	Vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site. One CNDDB occurrence within 5 miles of the Project area.
Vernal pool tadpole shrimp *Lepidurus packardi*	FE; —; —; —	Vernal pools, swales, and ephemeral freshwater habitat.	**None**; there is no suitable habitat for this species on-site.
WILDLIFE—AMPHIBIANS/REPTILES			
California red-legged frog *Rana draytonii*	FT; CSC; —; —	Requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or marsh communities with emergent vegetation.	**High**; potential suitable habitat in riparian areas and pond on-site and one reported occurrence within 5 miles.
California tiger salamander *Ambystoma californiense*	FT; CT; —; —	Ponded water required for breeding. Adults spend summer in small mammal burrows.	**None**; there is no suitable habitat for this species on-site.
Coast (California) horned lizard *Phrynosoma blainvillii*	FT; CT; —; —	Grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose sandy soil below 4,000 feet. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills.	**High**; there is suitable habitat on-site and four known occurrences within 5 miles.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site			
Common Name	**Regulatory Status (Federal; State; Local; CNPS)**	**Habitat Requirements**	**Potential for Occurrence**
Giant garter snake *Thamnophis gigas*	FT; CT; —; —	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November through mid-March).	**None**; there is no suitable habitat for this species on-site.
Foothill yellow-legged frog *Rana boylii*	—; CSC; —; —	Typically found in slow-moving streams or channels with rocky or muddy bottoms.	**Low**; there is potential habitat in riparian areas on the site, but no known occurrences within 5 miles.
Western pond turtle *Actinemys marmorata*	—; CSC; —; —	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	**High**; potential suitable habitat in riparian areas and pond on-site and one known occurrence within 5 miles.
Western spadefoot *Spea hammondii*	—; CSC; —; —	Open grasslands and woodlands. Requires vernal pools or seasonal wetlands for breeding.	**None**; there is no suitable habitat for this species on-site.
WILDLIFE—FISH			
Central Valley spring-run Chinook salmon *Oncorhynchus tshawytscha*	FT; CT; —; —	Sacramento and San Joaquin Rivers and their tributaries.	**None**; there is no suitable habitat for this species on-site.
Central Valley winter-run Chinook salmon *Oncorhynchus tshawytscha*	FE; CE; —; —	Sacramento and San Joaquin Rivers and their tributaries.	**None**; there is no suitable habitat for this species on-site.
Central Valley steelhead *Oncorhynchus mykiss*	FT; —; —; —	Sacramento and San Joaquin Rivers and their tributaries.	**None**; there is no suitable habitat for this species on-site.
Delta smelt *Hypomesus transpacificus*	FT; CE; —; —	Sacramento and San Joaquin Rivers and their tributaries.	**None**; there is no suitable habitat for this species on-site.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site			
Common Name	**Regulatory Status (Federal; State; Local; CNPS)**	**Habitat Requirements**	**Potential for Occurrence**
WILDLIFE—BIRDS			
Bald eagle *Haliaeetus leucocephalus*	FD; CFP; —; — (Nesting & Wintering)	Nesting restricted to the mountainous habitats near permanent water sources in the northernmost counties of California, the Central Coast Region, and on Santa Catalina Island. Winters throughout most of California at lakes, reservoirs, river systems, and coastal wetlands.	**None**; there is no suitable habitat for this species on-site. One CNDDB occurrence within 5 miles of the Project area.
Bank swallow *Riparia riparia*	—; CT; —; —	Nests in riverbanks and forages over riparian areas and adjacent uplands.	**None**; there is no suitable habitat for this species on-site.
California black rail *Laterallus jamaicensis coturniculus*	—; CT; —; —	Saltwater, brackish, and freshwater marshes.	**None**; there is no suitable habitat for this species on-site.
Cooper's hawk *Accipiter cooperii*	—; CSC; —; — (nesting)	Nests in riparian corridors. Forages in woodlands and riparian areas.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Double-crested cormorant *Phalacrocorax auritus*	—;CSC;—;— (nesting colony)	Colonial nester in tall trees along lake margins and on sequestered islets.	**None**; there is no suitable nesting habitat for this species on-site.
Golden eagle *Aquila chrysaetos*	—; CFP; —; —	Open and semi-open areas up to 12,000 feet in elevation. Builds stick nests on cliffs, in trees, or on artificial structures.	**Low**; there is marginal habitat on-site and one occurrence within 5 miles.
Grasshopper sparrow *Ammodramus savannarum*	—; CSC; —; — (nesting)	Frequents dense, dry, or well drained grassland, especially native grassland. Nests at base of overhanging clump of grass.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Great blue heron *Ardea herodias*	—; CSC; —; — (nesting colony)	Variety of habitats close to bodies of water including fresh and saltwater marshes, wet meadows, lake edges and shorelines. Colonial nester in tall trees, cliff sides and sequestered spots on marshes.	**None**; there is no suitable nesting habitat for this species on-site.
Great egret *Ardea alba*	—; CSC; —; — (nesting colony)	Found in salt and freshwater marshes of significant size, marshy ponds and tidal flats.	**None**; there is no suitable nesting habitat for this species on-site.
Merlin *Falco columbaris*	—; CSC; —; — (wintering)	Found in variety of relatively open habitats often near water and tree stands.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site			
Common Name	**Regulatory Status (Federal; State; Local; CNPS)**	**Habitat Requirements**	**Potential for Occurrence**
Osprey *Pandion haliaetus*	—; CSC; —; — (nesting)	Occur along the ocean shore, bays, freshwater lakes and larger streams. Large nests are built in tree tops within 15 miles of good fish-producing body of water.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Purple martin *Progne subis*	—; CSC; —; — (nesting)	Often nests in tall, old trees near body of water in open forests, woodlands, and riparian areas.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Swainson's hawk *Buteo Swainsoni*	—; CT; —; —	Nests in isolated trees or riparian woodlands adjacent to suitable foraging habitat (e.g., agricultural fields, grasslands) in Central Valley.	**None**; there is no suitable habitat for this species on-site.
Tricolored blackbird *Agelaius tricolor*	—; CSC; —; — (nesting colony)	Nests in dense blackberry, cattail, tules, willow, or wild rose within emergent wetlands throughout the Central Valley and foothills surrounding the valley.	**None**; there is no suitable nesting habitat for this species on-site. One CNDDB occurrence within 5 miles of the Project area.
Western burrowing owl *Athene cunicularia hypugaea*	—; CSC; —; — (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat.	**Low**; annual grassland provides potential habitat and one known occurrence within 5 miles. However, suitable burrows not observed on-site during biological assessment.
White-tailed kite *Elanus leucurus*	—; CFP; —; — (nesting)	Nests in isolated trees or woodland areas with suitable open foraging habitat.	**High**; there is suitable habitat on-site and two occurrences within 5 miles.
Other Raptors (Hawks, Owls and Vultures) and Migratory Birds	MBTA and Section 3503.5 Department of Fish and Game Code	Nests in a variety of communities including cismontane woodland, mixed coniferous forest, chaparral, montane meadow, riparian, and urban communities.	**High**; raptors were observed on-site during the biological assessment and woodlands provide potential nesting habitat.
WILDLIFE—MAMMALS			
American Badger *Taxidea taxus*	—; CSC; —; —	Found in a variety of grasslands, shrublands, and open woodlands throughout California with friable soils.	**None**; very rocky soils on-site are unsuitable habitat and no known occurrences within 5 miles.
Fisher *Martes pennanti*	FC; CSC; —; —	Large areas of dense coniferous forests and deciduous; riparian habitats with >50% canopy closure.	**None**; riparian habitat is small and fragmented and no known occurrences within 5 miles.

Table 3.4-1. Listed and Special-Status Species Potentially Occurring on or near the Site

Common Name	Regulatory Status (Federal; State; Local; CNPS)	Habitat Requirements	Potential for Occurrence
Pallid bat *Antrozous pallidus*	—; CSC; —; —	Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices and hollows in trees, rocks, cliffs, bridges, and buildings.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.
Silver-haired bat *Lasionycteris noctivagans*	—; CSC; —; —	Temperate, northern hardwoods with ponds or streams nearby. The typical day roost for the bat is behind loose tree bark.	**Low**; there is potential habitat on the site, but no known occurrences within 5 miles.

Source: Foothill Associates 2015
Notes: CNPS = California Native Plant Society

Federally-Listed Species:
FE = federal endangered
FT = federal threatened
FC = candidate
PT = proposed threatened
FPD = proposed for delisting
FD = delisted

Other Special-status Listing:
SLC = species of local or regional concern or conservation significance

California State Listed Species:
CE = California state endangered
CT = California state threatened
CR = California state rare
CSC = California species of special concern

CNPS* Rank Categories:
1A = plants presumed extinct in California
1B = plants rare, threatened, or endangered in California and elsewhere
2 = plants rare, threatened, or endangered in California, but common elsewhere
3 = plants about which we need more information
4 = plants of limited distribution

3.4.2.4.8 Listed and Special-Status Plants

Based on a records search of the CNDDB and the USFWS list, suitable habitat for special-status plant species occurs within the study area. The potential for occurrence has been determined for each species listed in Table 3.4-1 based on Foothill Associates' (2015) field observations and literature review. Nine species have a high potential to be found within the study area: Bisbee Peak rush-rose (*Helianthemum suffrutescens*), Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*), El Dorado bedstraw (*Galium californicum* ssp. *sierrae*), El Dorado County mule ears (*Wyethia reticulata*), Layne's butterweed (*Packera layneae*), Pine Hill ceanothus (*Ceanothus roderickii*), Pine Hill flannelbush (*Fremontodendron decumbens*), Red Hills soaproot (*Chlorogalum grandiflorum*), and Stebbins' morning glory, (*Calystegia stebbinsii*). The species that are considered to have a low potential on the site include the following: big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), Brewer's calandrinia (*Calandrinia breweri*), Hernandez bluecurls (*Trichostema rubisepalum*), Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), Jepson's onion (*Allium jepsonii*), Jepson's woolly sunflower (*Eriophyllum jepsonii*), Parry's horkelia *(Horkelia parryi*), Sanborn's onion (*Allium sanbornii* var. *sanbornii*), Sanford's arrowhead (*Sagittaria sanfordii*) and streambank spring beauty (*Claytonia parviflora* ssp. *brandegeeae*).

Plant Species with High Potential for Occurrence

Bisbee Peak Rush-rose

Bisbee Peak rush-rose is listed by CNPS as a Rank 3 species with a possibility of changing to a Rank 2B. It is typically found in chaparral areas and is often found on serpentine, gabbroic, or lone soils. It is an evergreen shrub which flowers April–June and is found at elevations ranging from 150–2750 feet amsl. There are eleven records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). This species was not observed on-site during the biological assessment, which was conducted near the end of the bloom season, but not all areas of suitable habitat could be accessed. Because of the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Brandegee's Clarkia

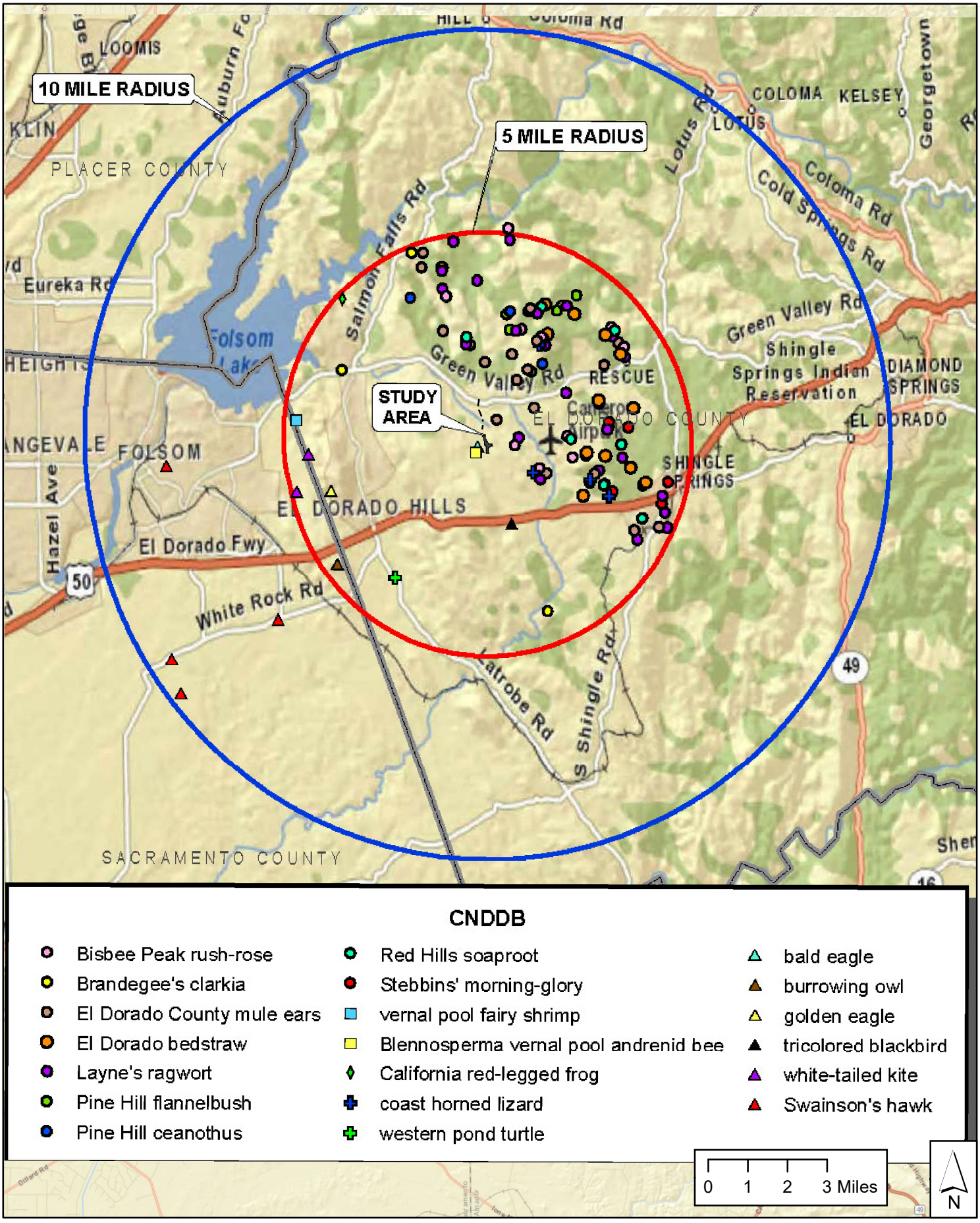
Brandegee's clarkia has no federal or state status, but is listed by CNPS as a Rank 4. It is typically found in foothill woodlands and low elevation conifer forests (CNPS 2014). The blooming period is from May through June. There are three records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). While this species was not observed on-site during the biological assessment, which was conducted near the end of the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

El Dorado Bedstraw

El Dorado bedstraw is listed as a State rare and federal endangered plant and by CNPS as a Rank 1B species. It is endemic to El Dorado County and gabbroic soils that occur there. They are most likely to occur on the Pine Hill intrusion serpentine soils. This plant species occurs in chaparral, cismontane woodland and lower coniferous forests from 300 to1,800 amsl. The identification period for this species is from May through June. There are 12 records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). While this species was not observed on-site during the biological assessment, which was conducted near the end of the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

El Dorado County Mule Ears

El Dorado County mule-ears does not have California state or federal protection, but is considered rare, threatened, or endangered in California and elsewhere by the CNPS. This species occurs on rocky cismontane woodland, and valley and foothill grassland, from 300 to 1,900 feet in elevation. It blooms from April to August. There are 12 records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). Although this species was not observed on-site during the biological assessment, which was conducted during the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.



SOURCE: Foothill Associates 2015
BASE MAP: ESRI 2015

Figure 3.4-3. CNDDB Query Results

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Layne's Butterweed

Layne's butterweed, also known as Layne's ragwort, is listed on the CNDDB list as federally threatened, California State rare; and is ranked by CNPS as rare, threatened, or endangered in California and elsewhere. This species blooms from April through August and is found in chaparral, cismontane woodland, on serpentine or gabbroic substrate from 600 to 3,000 feet elevation. There are 23 records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). Although this species was not observed on-site during the biological assessment, which was conducted during the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Pine Hill Ceanothus

Pine Hill ceanothus is listed on the CNDDB list as federally endangered, California State rare and rare, threatened, or endangered in California and elsewhere by CNPS. It blooms from April through June. Typical habitat is dry, stony soils in chaparral areas, and is often associated with serpentine or gabbro soil types. There are seven records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). This species was not observed on-site during the biological assessment, which was conducted near the end of the bloom season, but not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Pine Hill Flannelbush

Pine Hill flannelbush is federally listed as endangered and has a CNPS Rank 1B species. Pine Hill flannelbush is typically found in rocky areas associated with gabbro soils. This species typically flowers from April through July. There are seven records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). While this species was not observed on-site during the biological assessment, which was conducted during the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Red Hills Soaproot

Red Hills soaproot is a perennial herb that occurs in open hillsides in chaparral communities, which is usually associated with gabbro or serpentine soils. This species blooms from May through June and does not have federal or state protection, but is ranked by CNPS as rare, threatened, or endangered in California and elsewhere. There are eight records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). Although this species was not observed on-site during the biological assessment, which was conducted near the end of the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Stebbins' Morning Glory

Stebbin's morning glory is listed on the CNDDB list as federally endangered and endangered by the State of California, and is considered rare, threatened, or endangered in California and elsewhere by CNPS. This species is found on open hillsides in chaparral communities and blooms between April and July. This plant is typically associated with gabbro soil types although it can be found on serpentine soils. There are seven records of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). While this species was not observed on-site during the biological assessment, which was conducted during the bloom season, not all areas of suitable habitat could be accessed. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Plant Species with Low Potential for Occurrence

Big-Scale Balsam-Root

Big-scale balsam-root is an herbaceous perennial member of the sunflower family (*Asteraceae*). It has no state status, but is a federal species of local concern and it is on the CNPS Rank 1B. This species has large yellow flowering heads that bloom from March to June and leaves that arise from the ground. It differs, in part, from other balsam-roots by having coarsely serrate leaves. Big-scale balsam-root grows in open woodlands and grasslands at widely scattered locations in northern California, and will tolerate serpentine soil (CNPS 2014). There are no records for this species occurring within 5 miles of the Project site (CDFW 2014) and this species was not observed on-site during the biological assessment, which occurred at the end of the bloom season. However, since not all areas of suitable habitat could be accessed, there is low potential for this species to occur.

Brewer's Calandrinia

Brewer's calandrinia is found in disturbed or burned areas in chaparral or coastal scrub with sandy or loamy soils between 30 and 4,000 feet in elevation. This species has no federal or state status, but is listed by CNPS as a Rank 4 (CNPS 2014). It blooms with small fuchsia flowers from March to June. There are no records for this species occurring within 5 miles of the Project site (CDFW 2014) and this species was not observed on-site during the biological assessment, which occurred at the end of the bloom season. However, since not all areas of suitable habitat could be accessed, there is low potential for this species to occur.

Hernandez Bluecurls

Hernandez bluecurls are associated with volcanic or serpentinite, gravelly soil in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest and vernal pools, from 600 to 2,900 feet in elevation. This species has no federal or state protection, but is considered uncommon in California by CNPS. It blooms from June through August. Although not known within 5 miles of the Project site (CDFW 2014), this species may be found on soils and at the elevation similar to this site. This species was not observed on-site during the biological

assessment, which occurred during the bloom season. However, since not all areas of suitable habitat could be accessed, there is low potential for this species to occur.

Humboldt Lily

Humboldt lily occurs in openings in chaparral and cismontane woodland and lower montane coniferous forest from 360 to 3,400 feet in elevation. This species has no federal or stateprotection, but is considered uncommon in California by CNPS. It blooms from May through July. Although not found within 5 miles of the Project site (CDFW 2014), there is suitable habitat on-site. Although not observed on-site during the biological assessment, which occurred during the bloom season, since not all areas of suitable habitat could be accessed; there is low potential for this species to occur.

Jepson's Onion

Jepson's onion is listed as CNPS Rank 1B and blooms from April through August. This species is found on serpentine soils in chaparral, lower montane coniferous forest, and cismontane woodland. There are no records of this species occurring within 5 miles of the Project site (CDFW 2014). This species was not observed on-site during the biological assessment, which was conducted during the bloom season. However, since not all areas of suitable habitat could be accessed, there is low potential for this species to occur on-site.

Jepson's Woolly Sunflower

Jepson's wooly sunflower is a perennial herb that grows to 2 to 3 feet high and has small clusters of 1-inch golden yellow flowers that bloom from April to June. It is listed as CNPS Rank 4, but has no federal or state protections. Typical habitat is chaparral, woodlands, and coastal scrub sometimes on serpentine soils. Most recorded occurrences of this plant are along the east side of the coast range. There are no records for this species within 5 miles of the Project site (CDFW 2014) and the species was not observed on-site during the biological assessment, which was conducted near the end of the bloom season. However, since suitable habitat is present on-site and not all areas of the study area could be accessed, the potential for this species to occur on the site is low.

Parry's Horkelia

Parry's horkelia, a perennial herb, is a CNPS Rank 1B species. It blooms from April through September. Typical habitat is chaparral and foothill woodlands. There are no records for this species within 5 miles of the Project site (CDFW 2014) and the species was not observed on-site during the biological assessment, which was conducted during the bloom season. However, since suitable habitat is present on-site and not all areas of the study area could be accessed, the potential for this species to occur on the site is low.

Sanborn's Onion

Sanborn's onion is a perennial bulb that is classified as a CNPS Rank 4 plant, but has no federal or state protection. An inflorescence of small white to pink flowers blooms on an 8-inch to 2-foot stem from May to September. It is usually found in

gravelly serpentine soils in chaparral, woodlands, and coniferous forest. There are no records for this species within 5 miles of the Project site (CDFW 2014) and the species was not observed on-site during the biological assessment, which was conducted during the bloom season. Since not all suitable habitat in the study area could be accessed, the potential for this species to occur on the site is low.

Sanford's Arrowhead

Sanford's arrowhead is an aquatic perennial herb that occurs in shallow, freshwater wetland features such as marshes, swamps, ponds, ditches, and streams within California. This species blooms from May through October and is considered mostly extirpated from the Central Valley (CNPS 2014). There are no records of this species within 5 miles of the Project site (CDFW 2014). There is potential habitat for this species in the pond on the northern half of the site, which could not be surveyed during the biological assessment. Therefore, the potential for occurrence is low.

Streambank Spring Beauty

Habitat for the streambank spring beauty is rocky habitat in cismontane woodlands from 600 to 3,400 feet in elevation. This species has no federal or state protection, but is considered uncommon in California by CNPS. It blooms from February through April. There are no recorded occurrences within 5 miles of the Project site (CDFW 2014). Site surveys were conducted after the bloom season and all suitable habitats could not be accessed. There is suitable habitat on-site and thus this species is considered to have a low potential to occur.

3.4.2.4.9 Listed and Special-Status Animals

Based on a records search of the CNDDB and the USFWS list, suitable habitat for special-status animal species occurs within the study area. The potential for occurrence for each species listed in Table 3.4-1 has been determined based on field observations and literature review. The species that are considered to have a high potential to occur within the study area include: California red-legged frog (*Rana draytonii*) (CRLF), coast horned lizard (*Phrynosoma blainvillii*), western pond turtle (*Actinemys marmorata*), white-tailed kite (*Elanus leucurus*), and other raptors (hawks, owls, and vultures) and migratory birds. Species that are considered to have a low potential for occurrence include: Cosumnes spring stonefly (*Cosumnoperla hypocrena*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), foothill yellow-legged frog (*Rana boylii*) (FYLF), Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), grasshopper sparrow (*Ammodramus savannarum*), Merlin (*Falco columbaris*), osprey (*Pandion haliaetus*), purple martin (*Progne subis*), western burrowing owl (*Athene cunicularia hypugaea*), pallid bat (*Antrozous pallidus*), and silver-haired bat (*Lasionycteris noctivagans*).

Animal Species with High Potential for Occurrence

California Red-legged Frog

The federally threatened CRLF occurs primarily in ponds or pools of streams that retain water long enough for breeding and development of young (about 5 months). The adults often prefer dense, emergent or shoreline riparian vegetation closely associated with deep, still or slow-moving water, but may also be found in

unvegetated streamside areas that provide shade and shelter. Other key habitat features include good water quality and absence of introduced predators such as bullfrogs and predatory fishes. CRLFs typically aestivate in small mammal burrows and moist leaf litter within 200 feet of aquatic habitat, and they can disperse through upland habitats for distances of one mile or more at any time of year. There is one record of this species occurring within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). The pond is thought to be fed by a combination of spring inflow and irrigation runoff and contains water throughout the year. Water that typically ponds year-round is often inhabited by bull frogs and other fish, which are predators to the CRLF. However, due to private property access restrictions, the pond was not surveyed as part of the biological field studies conducted for this Draft SEIR; therefore, it is unknown whether bullfrogs and other fish inhabit the pond. Without verification of the presence of predator species, the potential for CRLF to occur within the study area is considered high.

Coast Horned Lizard

The coast horned lizard inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains from sea level to 8,000 feet in elevation. It is typically found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills (Zeiner et al. 1988). There are four CNDDB records of this species within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). Coast horned lizard was not observed during the site survey. Patches of rocky bare soil in annual grassland and chaparral provide potential habitat for this species. Due to the presence of suitable habitat and multiple occurrences in the vicinity, the potential for this species to occur on-site is high.

Western Pond Turtle

Western pond turtles require slow moving perennial aquatic habitats with suitable basking sites. Pond turtles have sometimes adapted to using irrigation ditches. Suitable aquatic habitat typically has a muddy or rocky bottom and has emergent aquatic vegetation for cover (Stebbins 2003). There is one record of western pond turtle within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014), and during field surveys for this Draft SEIR, Foothill Associates biologists observed a large turtle that appeared to be a western pond turtle in a pond immediately west of the study area. Although they could not be surveyed, the on-site pond and the two intermittent drainages within the Project site may provide potential aquatic habitat suitable for western pond turtle. Therefore the potential for this species to occur on the site is high.

White-Tailed Kite

The white-tailed kite is a medium-sized raptor that is a yearlong resident in coastal and valley lowlands in California. White-tailed kite are monogamous and breed from February to October, peaking from May to August (Zeiner et al. 1990). This species nests near the top of dense oaks, willows, or other large trees. There are two CNDDB records of white-tailed kite listed within 5 miles of the Project site (see Figure 3.4-3)

(CDFW 2014). The species was not observed on-site during the biological assessment conducted for this Draft SEIR. However, the oak woodland within the Project site provides potential nesting habitat for this species, and the annual grassland on-site provides potential foraging habitat. Therefore, the potential for this species to occur on the site is high.

Raptors and Other Migratory Birds

Raptor species forage and nest in a variety of habitats throughout El Dorado County. The nests of raptors and most other birds are protected under the MBTA. Raptors are also protected by Section 3503.5 of the California Fish and Game Code, which makes it illegal to destroy any active raptor nest. The various habitats within the study area provide potential nesting and foraging habitat for raptors and other protected bird species. Although no active nests were observed on the Project site during Foothill Associates field survey, a variety of avian species were observed. Raptors and other protected migratory birds have a high potential to occur within the study area.

Animal Species with Low Potential for Occurrence

Cooper's Hawk

Cooper's hawk is a summer resident in the Sierra foothills to southern California. It winters in the Central Valley. This species nests in woodland habitats with high canopy cover. It feeds primarily on small birds. This species nests in woodland areas often near water sources. The breeding season is typically March through August (Zeiner et al. 1990). There are no CNDDB records for this species within 5 miles of the Project site (CDFW 2014) and the species was not observed on-site during the biological assessment. However, there is suitable breeding and foraging habitat within the oak woodland communities within the study area. Therefore, the potential for this species to occur on the site is low.

Cosumnes Spring Stonefly

The Cosumnes spring stonefly occurs in freshwater intermittent streams. The females lay hundreds or even thousands of eggs in a ball which they initially carry about on their abdomens, and later deposit into the water. The eggs typically take 2 to 3 weeks to hatch, but some species undergo diapause with the eggs remaining dormant throughout a dry season, and hatching only when conditions are suitable. Stoneflies usually live in areas with running water. Although there are no CNDDB records for this species within 5 miles of the Project site (CDFW 2014), the intermittent drainages on-site are potential habitat and there is low potential for occurrence.

Foothill Yellow-Legged Frog

The FYLF is found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Adults often bask on exposed rock surfaces near streams. When disturbed, they dive into the water and take refuge under submerged rocks or sediments. During periods of inactivity, especially during cold weather, individuals seek cover under rocks in the streams or on shore within a few meters of water. There are no known occurrences of this species within 5 miles of the Project site (CDFW 2014) and this

species was not observed on the site during the biological assessment, but the seasonal drainages may provide habitat. There is low potential for this species to occur within the study area.

Golden Eagle

Golden eagles are found throughout California in a variety of habitats including grasslands, open scrublands, and woodlands. Golden eagles are federal and state species of special concern and are a fully protected species in the state of California. They construct large stick nests on cliff faces and in large trees surrounded by open areas and may return to a nest location for multiple years (Zeiner et al. 1990). Golden eagles typically feed on small mammals, birds, and reptiles. There is one record of this species nesting within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014). This species was not observed on-site during the biological assessment. Although the annual grasslands provide potential foraging habitat, the potential for this species to occur on-site is low.

Grasshopper Sparrow

The grasshopper sparrow (*Ammodramus savannarum*) is a small sparrow commonly found in moderately open grasslands with scattered small shrubs. It primarily occurs as a summer resident in California, where it breeds from mid-March to August. It nests on the ground, often with a dome of overhanging grasses. There are no occurrences within 5 miles of the Project site (CDFW 2014). The grasslands on the site provide marginal habitat and there is low potential for this species to occur within the Project site.

Merlin

The Merlin is a small, dark falcon. They are a rare to uncommon spring and fall transient and winter visitor throughout California. They typically arrive in late September and are gone by March (Small 1994). They occur in grasslands, savannahs, deserts, agricultural, and urban areas. There are no CNDDB records for this species within 5 miles of the Project site (CDFW 2014). However, there is suitable foraging habitat in the study area. Therefore, the potential for this species to occur on the site is low.

Purple Martin

Purple martin is a type of swallow found in riparian woodlands and coniferous forests from March through September. They use existing cavities, such as abandoned woodpecker nests, nest boxes, or under bridges or structures for nesting. Purple martins eat insects, which are usually caught in the air, but they may also forage on the ground. The riparian woodland within the study area provides potential foraging and nesting habitat. There are no known occurrences of this species within 5 miles of the Project site (CDFW 2014) and this species was not observed on the site during the site visit. There is low potential for this species to occur within the Project site.

Valley Elderberry Longhorn Beetle

The USFWS has determined the range of the beetle to include the watersheds of the American, San Joaquin, and Sacramento Rivers and their tributaries up to

approximately 3,000 feet amsl (USFWS 1980). Typically, the beetles are found on elderberry shrubs within riparian plant communities. Some studies have found that multiple elderberry shrubs clumped together provide superior habitat for the beetle while isolated elderberry shrubs are less likely to support beetle populations. Typical plant species that co-occur with the elderberry shrubs include California sycamore (*Platanus racemosa*), willows (*Salix* spp.), blackberry (*Rubus* spp.), and poison oak (*Toxicodendron diversilobum*) (USFWS 1984). Beetles require elderberry stems with a basal diameter of at least 1 inch in order for the larvae to utilize the stems (USFWS 1999). The valley elderberry longhorn beetle depends on elderberry shrubs for its entire lifecycle. Adults are typically active from March through May during the flowering period of the elderberry shrub. The female lays its eggs on the leaves and stems of the elderberry shrub. The larvae emerge within a few days and burrow into the elderberry stem. The larvae feed on the stem pith until they pupate. When the host shrub begins flowering, the pupa emerges from the stem as an adult (Barr 1991). Although no elderberry shrubs were observed were observed within the study area, they may be present in the riparian woodland on the north section of the site where property access was limited. There are no known occurrences of the beetle within 5 miles of the study area (CDFW 2014). Therefore the potential for occurrence within the Project site is low.

Western Burrowing Owl

Western burrowing owl is a small ground-dwelling owl that occurs in western North America from Canada to Mexico, and east to Texas, and Louisiana. Although in certain areas of its range western burrowing owls are migratory, these owls are predominantly nonmigratory in California (Zeiner et al. 1990). The western burrowing owl is an opportunistic forager, foraging on large arthropods, mainly beetle and grasshoppers, small mammals, reptiles, birds, and carrion. The breeding season for western burrowing owls occurs from March to August, peaking in April and May (Zeiner et al. 1990). Western burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. This owl is also known to use artificial burrows including pipes, culverts, and nest boxes. There is one recorded occurrence for this species within 5 miles of the Project site (see Figure 3.4-3) (CDFW 2014), though no burrowing owls or burrows were observed during the biological assessment. Additionally, very few potential burrow sites that could be used by western burrowing owl were observed during the field surveys. However, the annual grassland on-site does provide suitable habitat for this species to occur. In addition, the rubble piles within the annual grassland provide potential nesting habitat. Consequently, this species has a low potential to occur within the annual grassland community.

Special-Status Bat Species

Several special-status bat species, which are state species of concern, may be found within the Project vicinity including: pallid bat (*Antrozous pallidus*), fringed myotis (*Myotis thysanodes*), Yuma myotis (*Myotis yumaensis*), long-legged myotis (*Myotis volans*), long-eared myotis (*Myotis evotis*), western small-footed myotis (*Myotis ciliolabrum*), hoary bat (*Lasiurus cinereus*), western red bat (*Lasiurus blossevillii*), and Townsend's big-eared bat (*Corynorhinus townsendii*).

Three of the above species, fringed myotis, Yuma myotis, and Townsend's big-eared bat roost primarily in caves or buildings. There are no suitable nesting sites for these species in the study area. Long-legged myotis roost in buildings and small pockets or crevices in rock outcroppings. Western small-footed myotis roost in caves, mine, tunnels, rock crevices or buildings, in or near forested areas. There may be suitable rock crevices or outcroppings for these two species on the northern portion of the site that could not be accessed during the biological assessment.

The remaining four species of bats are known to roost in trees. Long-eared myotis live in thinly forested areas and occasionally caves. Hoary bats live in wooded areas and hang in trees. Western red bat roosts primarily in trees, usually at edges of streams, fields, or urban areas. Pallid bats roost in rock crevices and caves and occasionally hollow trees and buildings.

There are no CNDDB records for any of these nine special-status bat species within 5 miles of the Project site (CDFW 2014) and no bat species were observed on-site during the biological assessment conducted for this Draft SEIR. However, habitats on the Project site provide suitable roosting and foraging opportunities for multiple species. Therefore, the potential is low for special-status bat species to occur on the site.

3.4.2.5 Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act (CWA). Additionally, sensitive habitats are protected under the specific policies outlined in the County General Plan. Sensitive habitats within the Project site include oak woodlands, riparian habitat, and potential waters of the United States and are shown on Figure 3.4-2.

3.4.2.5.1 Potential Jurisdictional Waters of the United States

Potential jurisdictional waters of the United States within the Project site include a pond and two intermittent drainages. While 2.09 acres of wetlands were previously delineated and verified by USACE in 1988, that delineation and verification has expired and a new wetland delineation would be required to determine the specific current acreage of jurisdictional wetlands within the Project site. Access permission for pedestrian surveys and a wetland delineation was denied during this biological assessment. However, review of aerial imagery and the previous delineation indicates that there are 0.6 acre of pond and an unknown acreage (estimated up to 0.2 acres) of the two intermittent drainages.

3.4.2.5.2 Oak Woodlands

There are approximately 9.0 acres of oak canopy that occur within the blue oak woodland, riparian woodland, and portions of the chaparral. Thus, approximately 34 percent of the 26.4-acre study area has oak woodland canopy.

3.4.2.5.3 Riparian Habitat

Riparian habitat is found along the two intermittent drainages and around the pond as well as in the valley-foothill riparian habitat. Impacts to riparian habitat are regulated by CDFW. The limits of CDFW jurisdiction are the outermost bank or the edge of riparian vegetation, whichever is greater.

3.4.2.5.4 Wildlife Corridors

Wildlife corridors are linear areas of undeveloped land or open space that link larger natural and open space areas. These corridors allow animals to travel from one habitat area to another during seasonal migrations, natural dispersion, or daily routine. Wildlife corridors are essential to the long-term stability of many species because they allow genetic mixing and recolonization of areas after catastrophic events, such as fire.

The County General Plan identifies a number of Important Biological Corridors (IBC). The project site is not located within any existing IBC. Although a key wildlife crossing was indicated in the project area in a report prepared for the March 2015 General Plan Biological Policies Update Workshop, Bass Lake Road is also identified as a significant roadway (Dudek 2015). Since much of the surrounding area has been developed, the Project is not expected to have a significant negative effect on wildlife movement corridors. (Foothill Associates 2015)

3.4.3 Regulatory Framework

Federal, state, and local environmental laws, regulations, and policies relevant to the CEQA review process are summarized below.

3.4.4 Federal

3.4.4.1 Federal Endangered Species Act

The U.S. Congress passed the ESA in 1973 to protect those species that are endangered or threatened with extinction. ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

ESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (ESA Section 3[3][19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (Title 50 of the Code of Federal Regulations [CFR], Section 17.3 [50 CFR 17.3]). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR 17.3). Actions that result in take can result in civil or criminal penalties.

ESA and CWA Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in

the destruction or adverse modification of habitat of such species. The U.S. Army Corps of Engineers (Corps) must consult with the USFWS and/or the National Marine Fisheries Service (NMFS) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, ESA would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

3.4.4.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

3.4.4.3 Clean Water Act and Jurisdictional Waters of the United States

USACE regulates discharge of dredge or fill material into waters of the United States under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into waters of the United States, including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines (33 CFR 328.2[f]). In addition, Section 401 of the CWA (33 U.S. Code 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of waters is present. Methods for delineating wetlands and nontidal waters are described below.

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR Section 328.3[b]). Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.

The lateral extent of nontidal waters is determined by delineating the ordinary high water mark (OHWM) (33 CFR Section 328.4[c][1]). The OHWM is defined by USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil,

destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

3.4.5 State

3.4.5.1 California Endangered Species Act

The State of California enacted the CESA in 1984. CESA is similar to the ESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the CDFW, formally California Department of Fish and Game, when preparing CEQA documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code Section 2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish and Game Code Section 2081).

3.4.5.2 CDFW Species of Concern

In addition to formal listing under ESA and CESA, species receive additional consideration by CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of species of special concern, developed by CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

3.4.5.3 California Native Plant Society

CNPS maintains a rank of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS ranks:

Rank 1A: Plants presumed Extinct in California

Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere

Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere

Rank 3: Plants about which we need more information—A Review List

Rank 4: Plants of limited distribution—A Watch List

3.4.5.4 California Fish and Game Code Section 1600 et seq.

CDFW is a trustee agency that has jurisdiction over riparian areas and certain waters of the state under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or

obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures.

3.4.5.5 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

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 CDFW or USFWS;
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 CDFW or USFWS;
c) have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
d) interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
e) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
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.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population wide or region wide basis.

3.4.5.6 El Dorado County General Plan

The following goals, objectives, and policies are contained in the 2004 El Dorado County General Plan and are relevant to consider for applicability to biological resources and potential impacts associated with the Project and for consideration of the Project's consistency with the County General Plan.

Goal 7.3: Water Quality and Quantity—Conserve, enhance, and manage water resources and protect their quality from degradation.

Objective 7.3.1: Water Resources Protection—Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.

Policy 7.3.1.1: Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.

Policy 7.3.1.2: Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements as well as incentives for the conservation and wise use of water.

Policy 7.3.1.3: The County shall develop the criteria and draft an ordinance to allow and encourage the use of domestic gray water for landscape irrigation purposes. (See Title 22 of the State Water Code and the Graywater Regulations of the Uniform Plumbing Code).

Objective 7.3.2: Water Quality—Maintenance of and, where possible, improvement of the quality of underground and surface water.

Policy 7.3.2.1: Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.

Policy 7.3.2.2: Projects requiring a grading permit shall have an erosion control program approved, where necessary.

Policy 7.3.2.3: Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).

Policy 7.3.2.4: The County should evaluate feasible alternatives to the use of salt for ice control on County roads.

Policy 7.3.2.5: As a means to improve the water quality affecting the County's recreational waters, enhanced and increased detailed analytical water quality studies and monitoring should be implemented to identify and reduce point and non-point pollutants and contaminants. Where such studies or monitoring reports have identified sources of pollution, the County shall propose means to prevent, control, or treat identified pollutants and contaminants.

Objective 7.3.3: Wetlands—Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

Policy 7.3.3.1: For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual.

Policy 7.3.3.4: The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas.

Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction.

Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue.

For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.

Policy 7.3.3.5: Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.

Objective 7.3.4: Drainage—Protection and utilization of natural drainage patterns.

Policy 7.3.4.1: Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.

Policy 7.3.4.2: Modification of natural stream beds and flows shall be regulated to ensure that adequate mitigation measures are utilized.

Objective 7.3.5: Water Conservation—Conservation of water resources, encouragement of water conservation, and construction of wastewater disposal systems designed to reclaim and re-use treated wastewater on agricultural crops and for other irrigation and wildlife enhancement projects.

Policy 7.3.5.1: Drought-tolerant plant species, where feasible, shall be used for landscaping of commercial development. Where the use of drought-tolerant native plant species is feasible, they should be used instead of non-native plant species.

Policy 7.3.5.2: A list of appropriate local indigenous drought tolerant plant materials shall be maintained by the County Planning Department and made available to the public.

Policy 7.3.5.3: The County Parks and Recreation Division shall use drought tolerant landscaping for all new parks and park improvement projects.

Policy 7.3.5.4: Require efficient water conveyance systems in new construction. Establish a program of ongoing conversion of open ditch systems shall be considered for conversion to closed conduits, reclaimed water supplies, or both, as circumstances permit.

Policy 7.3.5.5: Encourage water reuse programs to conserve raw or potable water supplies consistent with State Law.

Goal 7.4: Wildlife and Vegetation Resources—Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

Objective 7.4.1: Rare, Threatened, and Endangered Species—The County shall protect State and Federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws.

Policy 7.4.1.5: Species, habitat, and natural community preservation/conservation strategies shall be prepared to protect special-status plant and animal species and natural communities and habitats when discretionary development is proposed on lands with such resources unless it is determined that those resources exist, and either are, or can be, protected, on public lands or private Natural Resource lands.

Policy 7.4.1.6: All development projects involving discretionary review shall be designed to avoid disturbance or fragmentation of important habitats to the extent reasonably feasible. Where avoidance is not possible, the development shall be required to fully mitigate the effects of important habitat loss and fragmentation. Mitigation shall be defined in the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8 and Implementation Measure CO-M).

Objective 7.4.2: Identify and Protect Resources—Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.

Policy 7.4.2.1: To the extent feasible in light of other General Plan policies and to the extent permitted by State law, the County of El Dorado will protect identified critical fish and wildlife habitat, as identified on the Important Biological Resources Map maintained at the Planning Department, through any of the following techniques: utilization of open space, Natural Resource land use designation, clustering, large lot design, setbacks, etc.

Policy 7.4.2.2: Where critical wildlife areas and migration corridors are identified during review of projects, the County shall protect the resources from degradation by requiring all portions of the project site that contain or influence said areas to be retained as non-disturbed natural areas through mandatory clustered development on suitable portions of the

project site or other means such as density transfers if clustering cannot be achieved. The setback distance for designated or protected migration corridors shall be determined as part of the project's environmental analysis. The intent and emphasis of the Open Space land use designation and of the non-disturbance policy is to ensure continued viability of contiguous or interdependent habitat areas and the preservation of all movement corridors between related habitats. The intent of mandatory clustering is to provide a mechanism for natural resource protection while allowing appropriate development of private property. Horticultural and grazing projects on agriculturally designated lands are exempt from the restrictions placed on disturbance of natural areas when utilizing "Best Management Practices" (BMPs) recommended by the County Agricultural Commission and adopted by the Board of Supervisors when not subject to Policy 7.1.2.7.

Policy 7.4.2.5: Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.

Policy 7.4.2.6: El Dorado County Biological Community Conservation Plans shall be required to protect, to the extent feasible, rare, threatened, and endangered plant species only when existing federal or State plans for non-jurisdictional areas do not provide adequate protection.

Objective 7.4.3: Coordinate with Appropriate Agencies—Coordination of wildlife and vegetation protection programs with appropriate Federal and State agencies.

Objective 7.4.4: Forest and Oak Woodland Resources—Protect and conserve forest and woodland resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values.

Policy 7.4.4.1: The Natural Resource land use designation shall be used to protect important forest resources from uses incompatible with timber harvesting.

Policy 7.4.4.2: Through the review of discretionary projects, the County, consistent with any limitations imposed by State law, shall encourage the protection, planting, restoration, and regeneration of native trees in new developments and within existing communities.

Policy 7.4.4.3: Utilize the clustering of development to retain the largest contiguous areas possible in wildland (undeveloped) status.

Policy 7.4.4.4: For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as defined in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's Integrated Natural

Resources Management Plan (INRMP) conservation fund described in Policy 7.4.2.8.

Option A
The County shall apply the following tree canopy retention standards:

Percent Existing Canopy Cover	Canopy Cover to be Retained
80–100	60% of existing canopy
60–79	70% of existing canopy
40–59	80% of existing canopy
20–39	85% of existing canopy
10–19	90% of existing canopy
1–9 for parcels >1 acre	90% of existing canopy

Under Option A, the project applicant shall also replace woodland habitat removed at 1:1 ratio. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8. Woodland replacement shall be based on a formula, developed by the County, that accounts for the number of trees and acreage affected.

Option B
The project applicant shall provide sufficient funding to the County's INRMP conservation fund, described in Policy 7.4.2.8, to fully compensate for the impact to oak woodland habitat. To compensate for fragmentation as well as habitat loss, the preservation mitigation ratio shall be 2:1 and based on the total woodland acreage onsite directly impacted by habitat loss and indirectly impacted by habitat fragmentation. The costs associated with acquisition, restoration, and management of the habitat protected shall be included in the mitigation fee. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8.

Policy 7.4.4.5: Where existing individual or a group of oak trees are lost within a stand, a corridor of oak trees shall be retained that maintains continuity between all portions of the stand. The retained corridor shall have a tree density that is equal to the density of the stand.

Objective 7.4.5: Native Vegetation and Landmark Trees—Protect and maintain native trees including oaks and landmark and heritage trees.

Policy 7.4.5.1: A tree survey, preservation, and replacement plan shall be required to be filed with the County prior to issuance of a grading permit for discretionary permits on all high-density residential, multifamily residential, commercial, and industrial projects. To ensure that proposed replacement trees survive, a mitigation monitoring plan should be incorporated into discretionary projects when applicable and shall include provisions for necessary replacement of trees.

Policy 7.4.5.2: It shall be the policy of the County to preserve native oaks wherever feasible, through the review of all proposed development activities where such trees are present on either public or private property, while

> at the same time recognizing individual rights to develop private property in a reasonable manner. To ensure that oak tree loss is reduced to reasonable acceptable levels, the County shall develop and implement an Oak Tree Preservation Ordinance (see General Plan policy for required components of Oak Tree Preservation Ordinance).

3.4.5.7 Interim Oak Woodland Guidelines

As discussed above, General Policy 7.4.4.4 required development of a Countywide oak woodland strategy. In 2008, the County adopted the *El Dorado County Oak Woodland Management Plan* (OWMP) to implement these General Plan oak woodland protection policies. The County's adoption of the OWMP was challenged in court, and in 2012 the Appellate Court upheld the CEQA challenge to the OWMP and remanded to the Superior Court which directed the County to rescind approval of the OWMP until additional CEQA analysis for the OWMP is performed. As a result, only Option A of Policy 7.4.4.4 is applicable to oak woodland mitigation.

As of the writing of this Draft SEIR, the County is in the process of updating the General Plan's biological resources policies and implementation measures, and that process is expected to be completed in 2016. Presently, impacts to oak woodlands and individual oak trees are evaluated in accordance with the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A) (Interim Guidelines), which were adopted on November 9, 2006, and amended on October 12, 2007. (The Interim Guidelines are included with this Draft SEIR as Appendix D-2.) Under the General Plan policy modifications currently being developed under direction of the Board of Supervisors, the existing Oak Woodland Management Plan would be replaced by an Oak Resources Management Plan. The modifications would still subject development projects to oak impact avoidance and mitigation requirements, but would revise Policy 7.4.4.4.

3.4.5.8 Community Services Districts

The El Dorado Hills Community Services District (EDHCSD) and the Cameron Park Community Services District (CPCSD) identify goals, objectives, and policies regarding oak tree preservation. Policies are enforced through the design review process, which applies to all developments for which the Districts provide enforcement of the Covenants, Conditions, and Restrictions. The Project site is adjacent to the Bass Lake Woodridge Village, which is subject to EDHCSD design review. Any work done within the village may be subject to review by the EDHCSD.

3.4.6 Methods and Significance Criteria

Impacts on biological resources in natural or semi-natural areas caused by development can be direct or indirect. Direct impacts include habitat loss and fragmentation, and conversion of native communities to developed conditions. Indirect impacts include invasion of nonnative plants into natural areas, noise disturbances, and declines in air and water quality.

Impacts of the Project were determined through the identification of existing biological resources (species and habitat) in the Project study area (as discussed in Section 3.4.2) and consideration of the potential effects of the Project on biological resources. CEQA Guidelines and the policies of

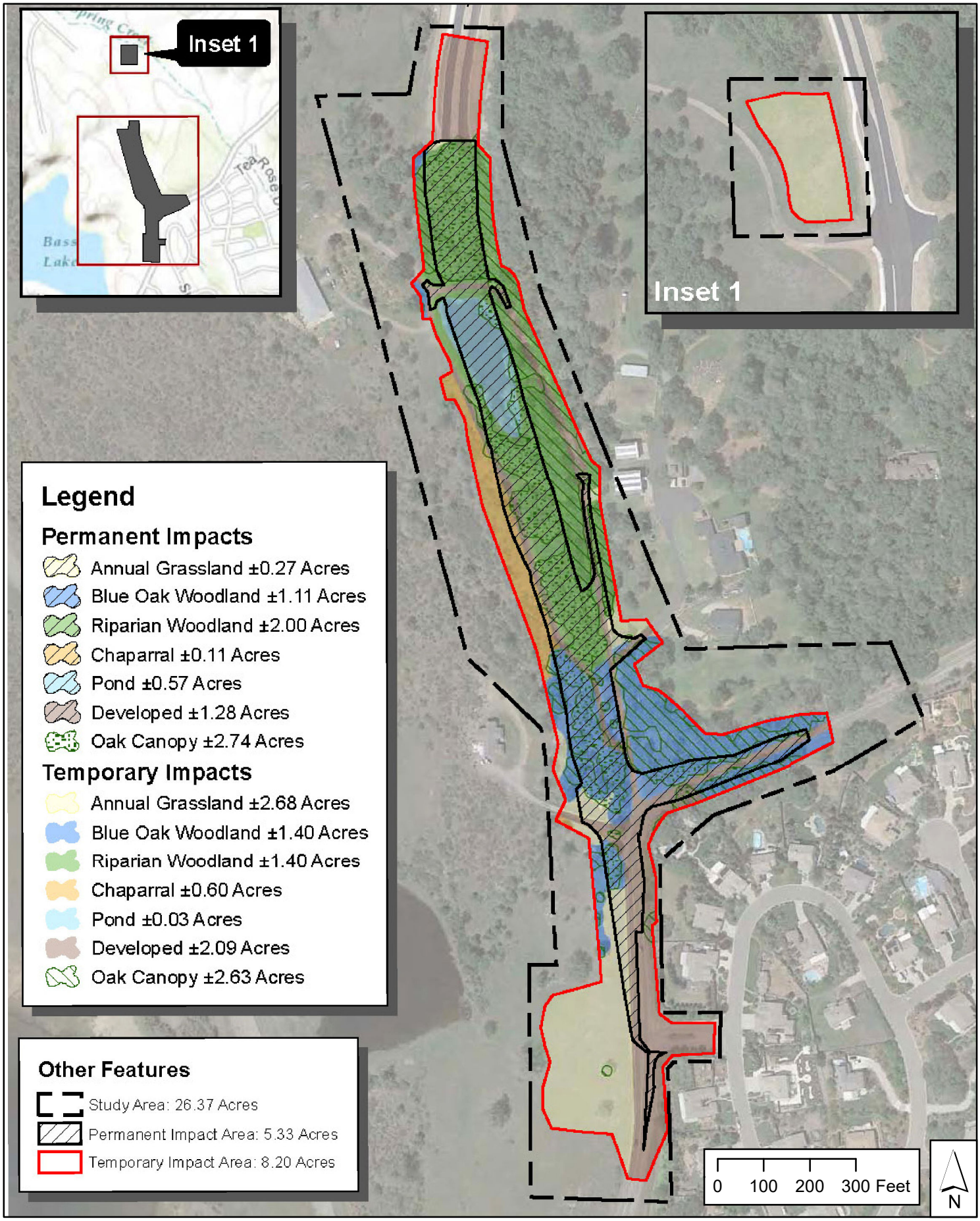
the El Dorado County General Plan were used to evaluate the significance of potential impacts resulting from the Project.

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of biological resources impacts:

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 CDFW, USFWS, or NMFS;
b) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulation, or by the CDFW, USFWS, or NMFS;
c) have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (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 site;
e) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan;
f) conflict with any El Dorado County polices or ordinances protecting biological resources; and/or
g) substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of an endangered, rare or threatened species.

3.4.7 Impacts and Mitigation Measures

As shown on Figure 3.4-4, "Biological Resources Habitat Impacts," the Project would result in up to 13.5 acres of total ground disturbance, including 11.6 acres associated with construction of the roadway and related features and 1.9 acres of potential temporary construction staging areas. Of the total disturbance, 8.2 acres would be temporary ground disturbance during construction for activities such as mobilization and materials storage (including the temporary construction staging areas) and grading, and these areas would be seeded and revegetated following construction. Approximately, 5.3 acres of permanent disturbance would occur as a result of road paving, sidewalks, medians, and other Project hardscape features. Table 3.4-2, "Biological Resources Communities of Temporary and Permanent Impacts," lists the acreages of the biological communities identified on the Project site and identifies the estimated acreages of temporary and permanent disturbance of each that would occur as a result of the Project.



SOURCE: Foothill Associates 2015
BASE MAP: Google Earth 2014

Figure 3.4-4. Biological Resources Habitat Impacts

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Temporary and permanent disturbance would have the potential to disturb or destroy sensitive habitats, adversely affecting special-status species having the potential to occur on the Project site. Impacts associated with special-status species and their habitats are enumerated below.

Table 3.4-2. Biological Resources Communities of Temporary and Permanent Impacts

Biological Community Type	Area within Study Area (acres)	Area of Permanent Disturbance (acres)	Area of Temporary Disturbance (acres)	Total Disturbance (acres)
Annual Grassland	6.8	0.27	2.68	2.95
Blue Oak Woodland	6.2	1.11	1.40	2.51
Riparian Woodland	4.8	2.00	1.40	3.40
Chaparral	3.2	0.11	0.60	0.71
Pond	0.6	0.57	0.03	0.60
Developed Areas	4.8	1.28	2.09	3.37
Total	**26.4**	**5.34**	**8.20**	**13.54**

Source: Foothill Associates 2015

Impact 3.4-1: Loss of suitable habitat for potentially occurring special-status plant species. (Potentially Significant)

The Project site contains suitable habitat for 19 special-status plant species that are known to occur in the vicinity. State and federally listed species include El Dorado bedstraw, Layne's butterweed, Pine Hill ceanothus, Pine Hill flannelbush, and Stebbins' morning glory. Non-listed special-status species include big-scale balsamroot, Bisbee Peak rush-rose, Brandegee's clarkia, Brewer's calandrinia, El Dorado County mule ears, Hernandez bluecurls, Humboldt lily, Jepson's onion, Jepson's woolly sunflower, Parry's horkelia, Red Hills soaproot, Sanborn's onion, Sanford's arrowhead, and streambank spring beauty. Ground disturbance associated with the Project would result in the temporary disturbance and permanent removal of 2.95 acres of annual grassland, 2.51 acres of blue oak woodland, 3.40 acres of riparian woodland, and 0.71 acres of chaparral, which provides habitat for potentially occurring listed and non-listed special status plants. Temporary disturbance and permanent removal would affect special-status plants, if present, through removal of the individuals and elimination of their habitat. The potential for loss of special-status plant species as a result of Project construction is considered a potentially significant impact. Mitigation Measure 3.4-1 requires that preconstruction surveys of the entire Project site be conducted and that specific measures be taken to avoid, relocated, and/or provide compensatory mitigation. Implementation of Mitigation Measure 3.4-1 would reduce the potential impact on special-status plant species to less than significant.

Mitigation Measure 3.4-1: ***Preconstruction special-status plant species surveys shall be conducted and plants shall be avoided or transplanted and additional measures shall be implemented.***

1) *Prior to construction, a qualified botanist shall conduct two botanical surveys; one in either in April or May and the other in June. The results of these surveys shall be documented in a letter report to the County. If no special-status plants are identified during the preconstruction special-status plant species surveys, no additional measures are required.*
2) *If any non-listed special-status plants are identified within areas of potential construction disturbance during preconstruction special-status plant species surveys, construction activities shall be managed to avoid the plants to the greatest extent feasible. A qualified biologist shall prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplanting procedures, success criteria, and long-term monitoring protocols. If the plants cannot be avoided, the plants and/or the seedbank shall be transplanted to a suitable habitat near the Project site. In addition, awareness training shall be conducted for construction workers, alerting workers to the presence of and protections for special-status plants.*
3) *If any federally listed plants are identified within areas of potential construction disturbance, the plants shall be avoided to the extent feasible. If the federally listed plants cannot be avoided, the County shall postpone construction activities until Section 7 consultation is conducted and a Biological Opinion from the USFWS is obtained. Measures to avoid impacts to federally listed plants as specified in the Biological Opinion shall be implemented before construction activities begin. Such measures may include transplanting, permanent preservation of off-site habitat, monitoring, and/or other measures deemed appropriate to fully mitigate the loss of federally listed plant species.*
4) *If any state-listed plants are identified within areas of potential construction disturbance, the plants shall be avoided to the extent feasible. If the state listed plants cannot be avoided, the County shall obtain an Incidental Take Permit from the CDFW. Measures to avoid impacts to state-listed plants as specified in the Incidental Take Permit conditions shall be implemented prior to the commencement of construction activities. Such measures may include transplanting, permanent preservation of off-site habitat, monitoring and/or other measures deemed appropriate to fully mitigate the loss of state-listed plant species.*

Significance with Mitigation: Less than Significant

Impact 3.4-2: Potential effects on Cosumnes spring stonefly. (Potentially Significant)

The two intermittent drainages on the north half of the site may provide suitable habitat for Cosumnes spring stonefly, a California species of special concern. Disturbance or other construction activities within the intermittent drainages, including placing fill, installing

culverts, or diverting the drainages, could adversely affect this species if it is present and this impact is considered potentially significant. Mitigation Measure 3.4-2 requires preconstruction surveys for Cosumnes spring stonefly and relocation or other appropriate measures in the event that the species is identified during these surveys. Implementation of Mitigation Measure 3.4-2 would reduce this potential impact to less than significant.

Mitigation Measure 3.4-2: ***Preconstruction Cosumnes spring stonefly surveys shall be conducted and, if present, the species shall be relocated to suitable habitat.***

1) *A qualified biologist shall conduct a preconstruction survey for Cosumnes spring stonefly within 14 days of the initiation of construction activities within intermittent drainages. If no Cosumnes spring stonefly is observed during such surveys, the survey methods and findings shall be documented and no additional measures are required.*
2) *If Cosumnes spring stonefly is identified during preconstruction surveys, a qualified biologist shall relocate the species to a portion of the intermittent drainage downstream of the work area, if possible, or to another nearly location of suitable habitat. Also if the species is identified during preconstruction surveys, a qualified biologist shall be on-site during any instream work for the purpose of relocating any species found within the construction footprint to suitable habitat away from the construction zone, and preconstruction worker awareness training shall be conducted alerting workers to the presence of and protections for the Cosumnes Spring stonefly.*

Significance with Mitigation: Less than Significant

Impact 3.4-3: Potential effects on Valley Elderberry Longhorn Beetle. (Potentially Significant)

No elderberry shrubs, habitat to the valley elderberry longhorn beetle (VELB) which is a federally listed Threatened species, were observed within the southern portion of the study area that was surveys. It is possible that elderberry shrubs may be present in the northern portion of the Project site where surveys were precluded due to access restrictions. If any elderberry shrubs are present within the site, they may be habitat for VELB. Disturbance or removal of elderberry shrubs during vegetation clearing associated with Project construction could adversely affect VELB, if present. Additionally, excessive dust, if generated during construction, could have an adverse effect on VELB if present in areas near the Project site. Potential loss of elderberry shrubs or other adverse effects on VELB is considered a potentially significant impact. Fugative dust suppression required pursuant to EDCAQMD rules and mitigation discussed in Section 3.3-2 would be sufficient to avoid potentially significant impacts associated with dust impacts to VELB. Mitigation Measure 3.4-3, below, requires preconstruction surveys for elderberry shrubs and, if identified, consultation with the USFWS and implementation of avoidance or other measures including transplanting and/or compensatory mitigation. Implementation of Mitigation Measure 3.4-3 would reduce the potential impact on VELB to less than significant.

Mitigation Measure 3.4-3: ***Preconstruction elderberry shrub surveys shall be conducted and, if present, the avoidance, relocation, and/or other measures through consultation with the USFWS shall be implemented.***

1) *A qualified biologist shall conduct a preconstruction survey for elderberry shrubs with the potential disturbance areas and an area at least 20 feet outside of potential disturbance areas. If no shrubs are found, no further VELB avoidance measures are required.*
2) *If elderberry shrubs are found in the areas of preconstruction surveys, the biologist shall inspect the shrubs to determine their stem diameter at ground level and to determine if there is any evidence of VELB habitation, such as exit holes. Consistent with USFWS guidance, a 100-foot buffer shall be established and maintained around any existing elderberry shrub to prevent potential VELB habitat from being impacted. If a 100-foot buffer cannot be maintained, the County shall initiate consultation with the USFWS to determine avoidance, minimization, and mitigation measures. At minimum, construction fencing shall be established around any shrubs proposed to be preserved that occur between 20 feet and 100 feet of construction activities. If any shrubs are proposed for removal, the elderberry shrubs shall be transplanted according to USFWS guidelines and in consultation with USFWS to a suitable designated mitigation area and additional elderberry shrubs and associated riparian plant species shall be planted in the designated mitigation area. As an alternative to transplanting and/or planting elderberry shrubs to offset impacts to shrubs that may be present onsite, the County, through consultation with USFWS, may purchase compensatory mitigation.*

Significance with Mitigation: Less than Significant

Impact 3.4-4: Potential effects on coast horned lizard. (Potentially Significant)

No coast horned lizards, a Threatened species under both federal and state listings, were observed during the biological assessment. However, the annual grassland onsite provides potential habitat for this species. Vegetation clearing within the annual grassland could impact these species if they are present during initial construction activities. In addition, construction equipment and vehicle movement could adversely affect these species if present within the construction areas, and this impact is considered potentially significant. Mitigation Measure 3.4-4 requires preconstruction surveys for coast horned lizard and consultation with USFWS and CDFW and implementation of appropriate avoidance measures in the event that the species is identified during these surveys. Implementation of Mitigation Measure 3.4-4 would reduce this potential impact to less than significant.

Mitigation Measure 3.4-4: ***Preconstruction coast horned lizard surveys shall be conducted and, if present, the species shall be relocated to suitable habitat.***

1) *A qualified biologist shall conduct a preconstruction survey for coast horned lizard within 14 days of the initiation of construction activities and prior to the reinitiation of construction if for any reason construction activities are halted for 14 or more consecutive days. If no coast horned lizards are observed during such surveys, the survey methods and findings shall be documented and no additional measures are required.*
2) *If coast horned lizards are found onsite during preconstruction surveys, CDFW and USFWS shall be consulted regarding appropriate avoidance or mitigation measures. Recommended avoidance measures include conducting a preconstruction worker awareness training and having a qualified biologist onsite during vegetation clearing activities within the annual grassland for the purpose of relocating any species found within the construction footprint to suitable habitat away from the construction zone. Additional mitigation for this species may also be required, as determined by the regulatory agencies.*

Significance with Mitigation: Less than Significant

Impact 3.4-5: Potential effects on California red-legged frog and foothill yellow-legged frog. (Potentially Significant)

Aquatic habitat within the Project site, in particular the pond in the northern portion of the site may provide suitable habitat for CRLF and/or FYLF; however, because of property access restrictions, whether suitable habitat is present and occupied by the species is undetermined at this time. Vegetation clearing, grading, and fill/elimination of aquatic habitat could directly affect individuals of these species and could eliminate suitable habitat for these species. Direct or indirect impacts to individuals or their habitat during construction in the absence of appropriate incidental take authorization or mitigation would be a significant impact and a violation of the federal Endangered Species Act. Mitigation Measure 3.4-5 requires preconstruction surveys consistent with surveys in accordance with protocol acceptable to the USFWS and CDFW and consultation with USFWS and CDFW and implementation of appropriate avoidance measures in the event that the species is identified during these surveys. Implementation of Mitigation Measure 3.4-5 would reduce this potential impact to less than significant.

Mitigation Measure 3.4-5: ***Consultation with USFWS and CDFW shall be initiated and preconstruction protocol surveys shall be conducted for CRLF and FYLF and, if present, additional consultation and impact avoidance measures shall be implemented prior to construction.***

1) *Prior to construction, a qualified biologist shall be retained by the County to consult with USFWS and CDFW to determine acceptable protocols for CRLF and FYLF preconstruction surveys. (Standard survey protocol for CRLF requires up to eight surveys consisting of two day and four night surveys during the breeding*

season (January–June) and one day and one night survey during the non-breeding season (July 1–September 30). There is no standard survey protocol for FYLF, standard visual encounter surveys should be used for this species, unless otherwise requested by USFWS or CDFW.) Once protocol is establish, a qualified biologist shall conduct and document surveys, including methods and results. If no species are identified through protocol levels surveys, documentation of the survey findings shall be provided to USFWS and CDFW for concurrence and no additional mitigation shall be required.

2) *If either CRLF or FYLF is found onsite during protocol surveys, the USFWS and CDFW shall be consulted to determine appropriate avoidance and minimization measures. Construction activities shall not proceed until such time as specific measures for avoidance of adverse effects to CRLF and FYLF are developed and implemented.*

Significance with Mitigation: Less than Significant

Impact 3.4-6: Potential effects on western pond turtle. (Potentially Significant)

The pond and intermittent drainages and surrounding uplands within the project site may be suitable habitat for western pond turtle, a California species of special concern, and they are known to occur in the vicinity. Disturbance or other construction activities within the intermittent drainages, including placing fill, installing culverts, or diverting the drainages, could adversely affect this species if it is present. In addition, vegetation clearing and grading within the vicinity of the pond and surrounding uplands could impact this species, if present, and the existing pond will be eliminated by the Project, permanently eliminating this potential habitat. Mitigation Measure 3.4-6 requires preconstruction surveys for western pond turtle and relocation or other appropriate measures in the event that the species is identified during these surveys. Implementation of Mitigation Measure 3.4-6 would reduce this potential impact to less than significant.

Mitigation Measure 3.4-6: Preconstruction western pond turtle surveys shall be conducted and, if present, the species shall be relocated to suitable habitat.

1) A qualified biologist shall conduct a preconstruction survey for western pond turtle within 14 days prior to any construction activity that would directly impact pond or stream habitat or disturb the ground within 300 feet of aquatic habitat and prior to the reinitiation of construction if for any reason construction activities are halted for 14 or more consecutive days. If no western pond turtle is observed during such surveys, the survey methods and findings shall be documented and no additional measures are required.

2) *If western pond turtle is identified during preconstruction surveys, a qualified biologist shall be on-site during initial clearing and grading within 300 feet of a drainage, pond, or other aquatic habitat. The biological monitor shall relocate any western pond turtles found within the construction footprint to suitable habitat away from the construction zone, but within the vicinity of the Project area, if required. In addition, a preconstruction worker awareness training*

program shall be conducted alerting workers to the presence of and protections for the western pond turtle.

Significance with Mitigation: Less than Significant

Impact 3.4-7: Potential effects on raptors and other migratory birds. (Potentially Significant)

Several species of raptors and other migratory birds may forage and nest on the Project site, including the special-status species white-tailed kite, Cooper's hawk, golden eagle, Merlin, grasshopper sparrow, and purple martin. Active nests are protected by the California Fish and Game code Section 3503.5 and the MBTA. Construction activities could result in disturbance of nest sites through temporary increases in ambient noise levels and increased human activity. In addition, vegetation clearing operations, including pruning or removal of trees and shrubs, could impact nesting birds if these activities occur during the nesting season (February 15 to August 31). If vegetation removal and grading activities begin during the nesting season (February 15 to August 31), disturbance to nest sites could adversely affect these species and this impact is considered potentially significant. Mitigation Measure 3.4-7 requires either avoidance of construction during the nesting season or establishment of buffer zones to prohibit construction activities in proximity to active nests. Implementation of Mitigation Measure 3.4-7 would reduce this potential impact to less than significant.

Mitigation Measure 3.4-7: ***Construction during the migratory bird nesting season shall be avoided or of buffer zones shall be established to prohibit construction activities in proximity to active nests.***

1) *Active construction, including removal of trees and shrubs and other vegetation clearing, shall be commenced during September 1 to January 31, if feasible. If construction activities begin during this period, migratory bird surveys are not required and no further mitigation is necessary.*
2) *If active construction will occur during the period between February 1 to August 31, a qualified biologist shall conduct a preconstruction survey for active nests. The preconstruction survey shall be conducted within 14 days prior to commencement of ground-disturbing activities. If the preconstruction survey shows that there is no evidence of active nests, a letter report shall be prepared to document the survey, and no additional measures are recommended. If construction does not commence within 14 days of the preconstruction survey, or halts for more than 14 days, an additional survey shall be conducted prior to starting work.*
3) *If nests are identified during preconstruction surveys and considered by the qualified biologist to be active, buffer zones shall be established to prohibit construction activities and minimize nest disturbance until the young have successfully fledged. A minimum 250-foot buffer shall be implemented around raptor nests. Buffer zones around other migratory bird nest vary by species, and shall be determined by a qualified biologist as sufficient to avoid adverse effects on nests and migratory birds. If establishing typical buffer zones is impractical, consultation with CDFW shall be initiated and reduced buffers combined with*

additional remediation measures shall be implemented with concurrence of CDFW.

4) *If active nests are found on-site, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. If disturbance is identified, construction activities shall cease and remedial actions shall be developed by the qualified biologist to ensure that reinitiation of construction avoids such disturbance. In addition, preconstruction worker awareness training should be conducted alerting workers to the presence of and protections for the active avian nests.*
5) *If active nests are found within any trees that would be removed associated with Project construction, a buffer shall be established around the trees and the trees shall not be removed until a biologist determines that the nestlings have successfully fledged.*

Significance with Mitigation: Less than Significant

Impact 3.4-8: Potential effects on Western burrowing owl. (Potentially Significant)

Burrowing owls, a California species of special concern, were not observed during the biological assessment; the site contains annual grassland that is potentially suitable habitat for burrowing owl. Vegetation clearing activities within the annual grassland habitat areas could impact potential nest sites for this species. In addition, noise and vibration associated with construction activities near annual grassland habitat could result in nest abandonment if the species is present. These potential adverse effects are considered potentially significant. Mitigation Measure 3.4-8 requires preconstruction surveys in accordance with the in accordance with the 2012 *California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation* (2012 Staff Report) (CDFW 2012) and consultation with the CDFW, and implementation of measures to avoid adverse effects, if it is determined that Project activities may affect burrowing owl habitat. Implementation of Mitigation Measure 3.4-8 would reduce this potential impact to less than significant.

Mitigation Measure 3.4-8: Western burrowing owl surveys shall be conducted and impact avoidance measures shall be implemented in consultation with CDFW.

1) *Prior to construction, a qualified biologist conduct Western burrowing owl surveys during the peak breeding season (mid-April and mid-July), in accordance with the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation (2012 Staff Report) (CDFW 2012). The survey area shall extend approximately 500 feet beyond the construction disturbance area, where access is permitted. A report documenting the results of the surveys shall be prepared and submitted to CDFW. If the surveys do not identify the presence of Western burrowing owl and with CDFW concurrence, no additional measures are required.*
2) *If burrowing owls are observed within the survey area, an impact assessment shall be prepared by a qualified biologist and submitted to the CDFW, in*

accordance with the 2012 Staff Report. If the assessment determines that Project activities may result in impacts to occupied western burrowing owl habitat, the County shall consult with CDFW and develop a detailed mitigation plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the 2012 Staff Report. The mitigation shall be implemented and shall be sufficient to ensure that no significant adverse effects occur to western burrowing owl.

Significance with Mitigation: Less than Significant

Impact 3.4-9: Potential effects on special-status bat species. (Potentially Significant)

Oak woodlands and rock outcroppings within the Project site could provide potential roosting habitat for various bat species. Removal of trees or rock outcroppings could adversely affect bats in the event they roost in areas that would be disturbed during Project construction. Such disturbance is considered to be a potentially significant impact. Mitigation Measure 3.4-9 requires preconstruction surveys and additional mitigation in the event that special-status bat species are present. Implementation of Mitigation Measure 3.4-9 would reduce this impact to less than significant.

Mitigation Measure 3.4-9: ***Special-status bat species surveys shall be conducted and impact avoidance measures shall be implemented.***

1) *A qualified biologist shall conduct a preconstruction survey for special-status bat species within 14 days prior to any construction activity that would directly impact trees, rock outcroppings or other potential bat habitat. If construction does not commence within 14 days of the preconstruction survey, or halts for more than 14 days, an additional survey shall be conducted prior to starting work. If no special-status species bats are observed during such surveys, the survey methods and findings shall be documented and no additional measures are required.*
2) *If special-status bat species are present and roosting on or within 100 feet of the Project site, a qualified biologist shall establish an appropriate buffer around the roost site sufficient to avoid significant adverse effects. At minimum, trees shall not be removed until the biologist has determined that the bat is no longer roosting in the tree. Additional mitigation measures for bat species, such as installation of bat boxes or alternate roost structures, shall be implemented upon recommendation of the qualified biologist special-status bat species are found to be roosting within the Project area. In addition, a preconstruction worker awareness training should be conducted alerting workers to the presence of and protections for various bat species.*

Significance with Mitigation: Less than Significant

Impact 3.4-10: Potential effects on waters of the United States, waters of the state, and wetlands. (Significant)

Construction activities necessary for the permanent placement of the new road and related facilities would fill the pond within the Project site with earthen material and the pond would be eliminated. The Project would also result in partial fill of intermittent drainages within the Project site. A total of 2.09 acres of jurisdictional waters were previously delineated and documented in the 1992 EIR. Although a permit for impacts to the pond was previously obtained, it has expired. Seasonal wetland mitigation credits were purchased for the Project in 2006, and may be applied to mitigation requirements for this project, at the discretion of USACE once a final determination of impacts and mitigation requirements are determined. Due to property access restrictions, an updated wetlands delineation of the Project site has not been conducted for preparation of this Draft SEIR; however, prior to construction, the County will need to prepare an updated delineation and obtain verification of the delineation from USACE. Permanent loss of wetlands in the absence of appropriate mitigation is considered a significant impact. Mitigation Measure 3.4-10 requires that the County update the wetlands delineation and obtain verification from the USACE, that the County implement mitigation sufficient to offset the loss of the pond and other waters of the United States and wetlands that would occur as a result of Project construction, and that the County obtain and comply with the terms of a streambed alteration agreement. Implementation of Mitigation Measure 3.4-10 would reduce this impact to less than significant.

Mitigation Measure 3.4-10: ***The County shall conduct and obtain USACE verification of a wetlands delineation of the Project site and shall provide appropriate mitigation to offset the loss of wetlands and other waters of the United States associated with the Project.***

1) *Prior to construction disturbances, an updated wetland delineation shall be completed and submitted to USACE for verification.*
2) *The Project shall avoid impacts to waters of the United States, waters of the state, and wetlands to the extent feasible.*
3) *A Section 404 permit shall be obtained from USACE and a Section 401 Water Quality Certification shall be obtained for the Central Valley Regional Water Quality Control Board (RWQCB) prior to initiation of any construction activities that would impact any water of the United States, or water of the state. Any waters of the United States or jurisdictional wetlands that would be lost or disturbed as a result of the Project shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with USACE mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE and the Central Valley RWQCB. Season wetland mitigation credits purchased by the County in 2006 may be applied to mitigation requirements for the Project, at the discretion of USACE.*
4) *The County shall consult with the CDFW for impacts to drainages, ponds, and riparian woodlands and obtain a Section 1600 Streambed Alteration Agreement from the CDFW prior to the initiation of construction activities. The County shall*

comply with all conditions of such permit, which are anticipated to include off-site habitat preservation and revegetation of disturbed areas on the Project site.

Significance with Mitigation: Less than Significant

Impact 3.4-11: Potential effects on oak woodlands. (Significant)

The Project would result in the removal of oak trees within the site, resulting in impacts to oak woodlands. For this analysis, and consistent with County General Plan policies, oak woodlands are measured and discussed in terms of canopy cover. A total of 9.0 acres of oak canopy is found in the 26.4 acre study area, equating to 34 percent canopy cover. The Project would result in the removal of approximately 5.37 acres of oak canopy, comprised of 2.74 acres within permanent disturbance areas and 2.63 acres within temporary disturbance areas. (The Project would result in the removal of oak canopy in excess of the Policy 7.4.4.4 Option A oak canopy retention standard. Consistency with Policy 7.4.4.4 is discussed further in this Draft SEIR in Section 3.9 at Impact 3.9-1. Implementation of Mitigation Measure 3.9-1 would ensure consistency with the General Plan.)

The loss of 5.37 acres of oak canopy is considered a significant biological resources impact due to the loss of habitat, particularly riparian woodland habitat. To mitigate the biological resources impact associated with the loss of oak woodlands associated with the Project, a combination of avoidance, protection, on-site replacement, where feasible, and offsite preservation or creation of oak woodland habitat is identified in Mitigation Measure 3.4-11. Once full access to the Project site is available and prior to the start of construction activities, a Tree Survey, Preservation, and Replacement Plan will need to be prepared, as required by the Interim Guidelines for Policy 7.4.4.4 (Option A) (Interim Guidelines), which were adopted on November 9, 2006 and amended on October 12, 2007. If required, a separate Important Habitat Mitigation Program should be developed once the entire site is accessible for survey. Implementation of Mitigation Measure 3.4-11 is considered sufficient to reduce the biological resources impact associated with the loss of oak woodlands to less than significant.

Mitigation Measure 3.4-11: ***The County shall minimize direct impacts and loss of oak woodlands and shall replace the loss of oak woodlands canopy on-site or off-site at a minimum ratio of 1:1.***

1) *Direct impacts and loss of oak trees within the Project site shall be minimized to the extent feasible. While complete avoidance of oak trees is not feasible given that the Project alignment passes through an area of oak woodland habitat and is constrained by surrounding development, the final design and layout of the road improvements shall avoid and minimize impacts to individual oak trees to the greatest extent possible.*
2) *Oak trees within and adjacent to the Project site that will not be directly removed as a result of the Project shall be protected during construction to avoid disturbance of the trees and their root zones. If trees identified for protection are ultimately damaged or destroyed as a result of unanticipated activities or other occurrence, mitigation for the damage or destruction of those trees should be*

required consistent with mitigation requirements for other trees removed as a result of the Project. An arborist certified by the International Society of Arboriculture (ISA) (Project arborist) shall be assigned to the Project during construction period grading and other ground disturbance activities to oversee implementation of these recommendations. To prevent additional loss of oak canopy in the temporary impact area, the following tree protection measures should be implemented:

a. Tree Protection Fencing, consisting of a minimum 4-foot-tall high-visibility fence (orange plastic snow fence or similar), shall be placed around the perimeter of the tree protection zone (TPZ) (dripline radius plus 1 foot) for all trees to remain. The TPZ is the minimum distance for placing protective fencing, but tree protection fencing should be placed as far outside of the TPZ as possible. Signs shall be placed along the fence at approximately 50-foot intervals. Each sign shall be a minimum of 2 by 2 feet and shall include the following:

TREE PROTECTION ZONE
DO NOT MOVE OR RELOCATE FENCE
UNTIL PROJECT COMPLETION WITHOUT
PERMISSION OF PROJECT ARBORIST
OR EL DORADO COUNTY

- *Whenever possible, fence multiple trees together in a single TPZ.*
- *If permanent site improvements (e.g., paving and sidewalks) encroach into the TPZ, install fence at limit of work. If temporary impacts (e.g., grading, utility installation) require encroachment into the TPZ, move fence to limit of work during active construction of item and return to edge of TPZ once work is completed.*
- *Tree protection fencing shall not be moved without prior authorization from the Project arborist or as detailed on approved plans.*
- *Avoid paving within TPZ. If paving cannot be avoided, use porous materials where feasible.*
- *Parking, portable toilets, dumping or storage of any construction materials, including oil, gas, or other chemicals, or other infringement by workers or domesticated animals shall be prohibited in the TPZ.*
- *No signs, ropes, cables, metal stakes, or any other items shall be attached to a protected tree, unless recommended by the Project arborist.*
- *Grading, excavation, or trenching within the TPZ should be avoided to the greatest extent feasible. Under no circumstances should fill soil be placed against the trunk of an existing tree.*
- *Any grading or ground disturbance within 20 feet of the edge of the TPZ shall be supervised by the Project arborist and*

recommendations by the Project arborist regarding root avoidance and other excavation measures shall be implemented to the extent feasible.

- *Underground utilities should be avoided in the TPZ, but if necessary shall be bored or drilled. No trenching is allowed within the TPZ unless specifically approved by the Project arborist.*
- *Drains shall be installed according to County specifications to avoid harm to existing oak trees due to excess watering.*
- *Pruning of living limbs or roots shall be done under the supervision of the Project arborist. All pruning should be done by hand, air knife, or water jet, in accordance with ISA standards using tree maintenance best practices. Climbing spikes should not be used on living trees. Limbs should be removed with clean cuts just outside the crown collar.*
- *Cover exposed roots or cut root ends in trenches with damp burlap to prevent drying out.*
- *Minimize disturbance to the native ground surface (e.g., grass, leaf, litter, or mulch) under preserved trees to the greatest extent feasible.*
- *Native woody plant material (trees and shrubs to be removed) may be chipped or mulched on the site and placed in a 4 to 6 inch deep layer around existing trees to remain. Mulch shall not be placed in contact with the trunk of preserved trees.*
- *Deep water preserved trees that have had roots cut during project activities once a month throughout the summer as needed or as recommended by the Project arborist.*
- *Appropriate fire prevention techniques shall be employed around all trees to be preserved. This includes cutting tall grass, removing flammable debris within the TPZ, and prohibiting the use of tools that may cause sparks, such as metal bladed trimmers or mowers.*
- *No open flames shall be permitted within 15 feet of the tree canopy.*
- *Damage to any protected tree during construction shall be immediately reported to the Project arborist and to El Dorado County Planning Services. Damage shall be corrected as required by the County representative.*
- *Any landscaping within the TPZ should minimize ground disturbance and may include drought-tolerant plants, bark mulch, or natural vegetative cover. Rock mulches such as cobbles, boulders, or gravel shall not be used. All landscaping shall be kept at least 4 feet from trunk.*

b. Oak canopy replacement shall adhere to the requirements listed below pursuant to the 2007 Interim Interpretive Guidelines for Policy 7.4.4.4 (Option A) (Interim Guidelines). In the event that the Interim Guidelines are amended or replaced by action of the Board of Supervisors, oak canopy replacement requirements for the project may be modified accordingly.

- *Oak canopy cover lost as a result of the Project shall be offset at a 1:1 ratio in the form of either onsite or off-site replanting or preservation of off-site oak woodland through a conservation easement.*
- *Onsite and offsite oak canopy replacement may be implemented either through sapling or 1-gallon tree planting at a rate of 200 trees per acre or acorn planting at a rate of 600 acorns per acre. Ten years of maintenance and monitoring shall be conducted for seedlings or tree plantings and fifteen years of maintenance an monitoring shall be conducted for acorn plantings. Any replacement plantings shall be made as necessary to achieve the mitigation requirement. Any replacement plantings made within the final 2 years of the initial 5-year period shall be maintained for a minimum period of 2 years. Oak woodland canopy replacement shall be considered successful if 90 percent of the trees survive at the end of the maintenance and monitoring period. Off-site planting areas shall be placed in a conservation easement with assurances of permanent preservation. Mitigation planting procedures, maintenance schedule, monitoring protocols, and success criteria shall be documented in a detailed Tree Survey, Preservation, and Replacement Plan, which shall be prepared once full access to the Project site is available and prior to the initiation of construction activities.*

Significance with Mitigation: Less than Significant

3.5 Cultural Resources

This section discusses potential cultural resources impacts of the Project. Much of the information presented here is based on field work and resource evaluations conducted as a component of the 1992 Bass Lake Road Realignment Project environmental review and subsequent archaeological and historical investigations conducted in 2005 and prior associated with Clean Water Act (CWA) permitting efforts at that time which required demonstrating compliance with Section 106 of the National Historic Preservation Act (NHPA).

The term "cultural resources" encompasses historic, archaeological, and paleontological resources and burial sites. Below is a brief summary of each component:

Historic Resources: Historic resources are associated with the relatively recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods and are generally less than 200 years old.

Archaeological Resources: Archaeology is the study of prehistoric human activities and cultures. Archaeological resources are generally associated with Native American cultures.

Paleontological Resources: Paleontological resources are plant and animal fossils.

Burial Sites: Burial sites are formal or informal locations where human remains, usually associated with indigenous cultures, are interred.

3.5.1 Summary of the 1992 Bass Lake Road Realignment EIR Cultural Resources Evaluation

The 1992 Bass Lake Road Realignment EIR identified that no cultural or historical resources were found during surveys for the Project within or immediately adjacent to the realignment right-of-way, but also noted that review of previous studies revealed the existence of fifteen cultural or historical resources in the general surrounding area on the Benson and Sedar property. Seven of these are isolated finds, a single artifact or feature without cultural context. The closest find to the realignment route was PA-88-33 located approximately 100 feet east of the realignment area, and the significance of that site was not determined at the time the 1992 EIR was completed. Therefore, the 1992 EIR identified that the site should be treated as significant would should be fenced or marked during construction. That site is located north of the current Project segment of Silver Springs Parkway evaluated in this Draft SEIR. The 1992 EIR also identified the potential for discovery of archaeological resources during construction and included Mitigation Measure H-2 that required stoppage of work and investigation of the find by a qualified archaeologist to determine appropriate treatment. The same measure also required notification of the Native American Heritage Commission and the County Coroner in the event of discovery during construction of potential human bone.

3.5.2 Environmental Setting

Information presented here is based primarily on *Determination of Eligibility and Effect for Cultural Resources within the Bass Lake Road Extension Project* (Peak 2005) and included in Appendix E of this Draft SEIR. (Peak 2005 contains additional reference citations and sources.)

3.5.2.1 Ethnographic Background

The Project area is in the territory of the Nisenan branch of the Maidu group of the Penutian language family. Tribes of this language family dominated the Central Valley, San Francisco Bay areas, and western Sierra Nevada foothills. The Nisenan controlled the drainages of the Yuba, Bear, and American rivers, along with the lower portion of the Feather River. The tribes of this whole region referred to themselves as Nisenan, meaning "people," in contrast to the surrounding tribes, in spite of close linguistic and cultural similarities. For this reason, they are usually named by this term rather than the more technical "Southern Maidu." The local main village was of more importance to the people than the tribal designation, and groups identified themselves by the name of the central village (Peak 2005).

Their northern boundary of the Nisenan has not been clearly established due to similarity in language to neighboring groups. The eastern boundary was the crest of the Sierra Nevada. The southern boundary is thought to have been a few miles south of the confluence of the American and Sacramento rivers on the valley floor. The western boundary extended from this point upstream to the mouth of the Feather River (Peak 2005).

The Valley Maidu settlement pattern was basically oriented to major river drainages, with ancillary villages located on tributary streams and sloughs. Major villages often supported a population exceeding five hundred people, and flat grasslands between water courses were used for collecting vegetable foods and hunting, but little, if any, archeological evidence remains from these activities (Peak 2005).

Both the valley and foothill Nisenan lived by hunting and gathering, with the latter being more important. Acorns in the forms of meal, soup or bread provided the staple diet, augmented by a wide variety of seeds and tubers. Hunting and fishing were regularly practiced, but provided less of the diet than vegetable foods. The bedrock mortar and pestle were employed to process the acorn meats into flour, and the mortar cups are frequently found throughout the range of oak trees. Both salmon and eel were caught at Salmon Falls near Folsom (Peak 2005).

In 1833, an epidemic, thought to have been malaria, swept through the Sacramento Valley and is estimated to have killed 75 percent of the native population. The Nisenan of the mountain areas felt little of the impact of European settlement in California as compared to the Valley Nisenan, who were subjected to some missionization. The Mountain Nisenan, remote from these early impacts, were overwhelmed by the influx of European and others during the subsequent era of the California Gold Rush. (Peak 2005) Native ways of life were almost totally abandoned, and only a few families in Placer, Nevada, Yuba, and El Dorado Counties identify themselves as Nisenan and can speak the language. (Peak 2005)

3.5.2.2 Historical Background

The history of the Central Valley and western Sierra Nevada foothills can be divided into several periods of influence; two pertinent historic periods are summarized below.

3.5.2.2.1 Spanish Period

The most drastic and permanent change came to the Native Americans' way of life with the establishment of the Spanish Mission system. By the early 1800s, the mission fathers began a

process of cultural change that brought the majority of the local Native Americans into the missions, although the Maidu, especially the ones living in the mountain regions, were not as affected as the Native Americans living in the coastal regions near the missions. At the expense of traditional skills, the neophytes were taught the pastoral and horticultural skills of the Hispanic tradition. Spanish missionaries traveled into the Valley to recapture escaped neophytes and recruit inland Native Americans for the coastal missions. In 1834, the Mission system was officially secularized, and the majority of the mission Native American population dispersed to local ranches, villages, or nearby pueblos.

Soon after establishment of the mission system, a process of granting large parcels of land to prominent individuals began. Within a few years, ranchos occupied large tracts near the missions, and a pastoral economy involving the missions, the ranchos, and native inhabitants was established.

3.5.2.2.2 Mexican Period

With the declaration of Mexican independence in 1821, Spanish control of Alta California ended, although little change actually occurred. Political change did not take place until mission secularization in 1834, when Native Americans were released from missionary control and the mission lands were granted to private individuals. Mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal existence as laborers for large ranchos. Following mission secularization, the Mexican population grew as the native population continued to decline. European-American settlers began to arrive in Alta California during this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to receive land grants.

3.5.2.2.3 El Dorado County and the Gold Rush Era

In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started a gold rush into the region that forever altered the course of California's history. Hangtown, present-day Placerville, became one of the closest towns offering mining supplies and other necessities for the miners in Coloma.

By 1864, California's gold rush had essentially ended. Once the gold rush was over, people in towns such as Jackson, Placerville, and Diamond Springs turned to other means of commerce such as ranching, agriculture, and timber production. Specifically, the Placerville region turned to, among the other trades, viticulture, thereby setting off the lucrative California wine industry. In 1869, the transcontinental railroad linked Sacramento more directly to the central and eastern United States. California's agricultural products quickly found markets throughout the country. Ranching, transportation, logging, and subsequent water diversion projects represent major historic themes for the Diamond Springs and Shingle Springs area. In addition, El Dorado County has continued to grow in importance as a residential community, with Placerville as its center of government, industry, transportation, and commerce.

Green Valley Road follows part of the route of the earliest and one of the most important Gold Rush era transportation routes in El Dorado County. This route led from Sutter's Fort to

Coloma and was laid out by Sutter in 1847-48 as a route to his sawmill at Coloma. The route was adopted by the gold seekers pouring into the Coloma area and continued to be a major transportation corridor for many years. The road was used by the Pony Express in 1860-61, during the enterprise's brief but spectacular existence. It was also the route of the first stagecoach line in California, started in 1849 by James Birch (Peak 2005).

The immediate Project vicinity was not greatly affected by the Gold Rush except for the development of transportation routes. Mining was not intensive in the immediate Project area, and the primary economic basis from the earliest days on was agriculture. Bass Lake is an early reservoir, appearing as early as the 1866 General Land Office plat of the township.

3.5.2.3 Records Search

A review of the files maintained at the North Central Information Center of the California Historical Resources Information System was conducted on 2005 in association with Peak 2005 investigations. The record search revealed that a number of surveys have been conducted in and near the Project area, with the nearest recorded site, CA-ELD-1198H, located immediately east of the Project area. Site CA-ELD-1198H is described as the remains of the Zimmelman ranch (Peak 2005).

3.5.2.4 Native American Consultation

A letter was sent to the Native American Heritage Commission in 2005 requesting a check of the Sacred Lands files. The Native American Heritage Commission responded on March 8, 2005, indicating that there are no reported Sacred Lands (Peak 2005: Appendix 3). The Native American Heritage Commission provided a list of potential contacts. Letters were then sent to: Jeff Murray, Shingle Springs Rancheria, the El Dorado Indian Council, and Jeri Scambler, El Dorado Miwok Tribe, requesting information on-site of concern in or near the Project area.

3.5.2.5 Known Cultural Resources

No historic or other cultural resources of potential significance have been identified within the Project site (Peak 2005).

3.5.3 Regulatory Framework

3.5.3.1 Federal—National Historic Preservation Act

The NHPA, as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation’s significant prehistoric and historic properties. Under Title 36 of the Code of Federal Regulations (CFR), Section 60 (36 CFR 60), a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents

a significant and distinguishable entity whose components may lack individual distinction.

- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

3.5.3.2 State

3.5.3.2.1 California Register of Historical Resources

Section 5020 et seq. of the California Public Resources Code establishes the California Register of Historical Resources (CRHR), a listing of significant historic resources in the State similar to the NRHP at the national level. NRHP listed or eligible properties located in California are automatically listed in the CRHR. To be eligible for the California Register, an historical resource must be significant at the local, state, or national level under one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- It is associated with the lives of persons important to local, California, or national history; or
- It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

3.5.3.2.2 California Environmental Quality Act

The principal State regulations relating to preserving historic and archaeological properties are Public Resources Code Section 5020 et seq., CEQA Sections 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5. For purposes of CEQA, "historical resources" include:

- A resource listed in, or determined eligible for listing in, the CRHR;
- A resource included in a local register of historical resources adopted pursuant to a local ordinance or resolution, or included in a historical resource survey, meeting the requirements of California Public Resource Code (PRC) Section 5024.1(g); or
- Any resource that the lead agency deems to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

CEQA also applies to effects on archaeological resources that are historical resources. For purposes of CEQA analysis of significant effects on the environment, an archaeological resource that is not also a historical resource must be "unique"—i.e., there must be a high

probability that it: (1) contains information needed to answer important scientific research questions, and that it is the subject of demonstrable public interest; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized prehistoric or historic event or person (PRC 21083.2[a] and [g]).

CEQA specifies that a project that may cause a substantial adverse change in a significance of a historical resource may have a significant effect on the environment (PRC 21084.1). A substantial adverse change includes physical demolition, destruction, relocation or alteration of the resource such that the significance of a resource is materially impaired (14 California Code of Regulations [CCR] Section 15064.5[b]). A lead agency must identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource (14 CCR Section 15064.5[b][4]). Guidance on reducing or avoiding historic resource impacts is available through the Secretary of the Interior's standards for the treatment of historic properties and guidelines for preserving, rehabilitating, restoring, and reconstructing historic buildings.

CEQA also applies to significant effects on "unique" archaeological resources. If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be made to leave the resource in place, or may require other mitigation subject to certain financial and timing limitations set forth by CEQA (PRC 21083.2[b]–[e]). Impacts on nonunique archaeological resources need not be evaluated under CEQA.

3.5.3.3 Local—El Dorado County General Plan

County General Plan (El Dorado County 2004) policies related to cultural resources are contained the Conservation and Open Space Element. Pertinent excerpts are presented below.

Goal 7.5: Cultural Resources—Ensure the preservation of the County's important cultural resources.

Objective 7.5.1: Protection of Cultural Heritage—Creation of an identification and preservation program for the County's cultural resources.

Policy 7.5.1.1: The County shall establish a Cultural Resources Ordinance. This ordinance shall provide a broad regulatory framework for the mitigation of impacts on cultural resources (including historic, prehistoric and paleontological resources) by discretionary projects. This Ordinance should include (but not be limited to) and provide for the following:

A. Appropriate (as per guidance from the Native American Heritage Commission) Native American monitors to be notified regarding projects involving significant ground-disturbing activities that could affect significant resources.

B. A 100-foot development setback in sensitive areas as a study threshold when deemed appropriate.

C. Identification of appropriate buffers, given the nature of the resources within which ground-disturbing activities should be limited.

D. A definition of cultural resources that are significant to the County. This definition shall conform to (but not necessarily be limited to) the significance criteria used for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) and Society of Vertebrate Paleontology.

E. Formulation of project review guidelines for all development projects.

F. Development of a cultural resources sensitivity map of the County.

Policy 7.5.1.2: Reports and/or maps identifying specific locations of archaeological or historical sites shall be kept confidential in the Planning Department but shall be disclosed where applicable.

Policy 7.5.1.3: Cultural resource studies (historic, prehistoric, and paleontological resources) shall be conducted prior to approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, the Museum of Paleontology, University of California, Berkeley, field surveys, subsurface testing, and/or salvage excavations. The avoidance and protection of sites shall be encouraged.

Policy 7.5.1.4: Promote the registration of historic districts, sites, buildings, structures, and objects in the National Register of Historic Places and inclusion in the California State Office of Historic Preservation's California Points of Historic Interest and California Inventory of Historic Resources.

Policy 7.5.1.5: A Cultural Resources Preservation Commission shall be formed to aid in the protection and preservation of the County's important cultural resources. The Commission's duties shall include, but are not limited to:

A. Assisting in the formulation of policies for the identification, treatment, and protection of cultural resources (including historic cemeteries) and the curation of any artifacts collected during field collection/excavation;

B. Assisting in preparation of a cultural resources inventory (to include prehistoric sites and historic sites and structures of local importance);

C. Reviewing all projects with identified cultural resources and making recommendations on appropriate forms of protection and mitigation; and

D. Reviewing sites for possible inclusion in the National Register of Historic Places, California Register, and other State and local lists of cultural properties.

The County shall request to become a Certified Local Government (CLG) through the State Office of Historic Preservation. Certification would qualify the County for grants to aid in historic preservation projects. The Cultural Resources Preservation Commission could serve as the Commission required for the CLG program.

Policy 7.5.1.6: The County shall treat any significant cultural resources (i.e., those determined California Register of Historical Resources/National Register of Historic Places eligible and unique paleontological resources), documented as a result of a conformity review for ministerial development, in accordance with CEQA standards.

Objective 7.5.2: Visual Integrity—Maintenance of the visual integrity of historic resources.

Policy 7.5.2.1: Create Historic Design Control Districts for areas, places, sites, structures, or uses which have special historic significance.

Policy 7.5.2.2: The County shall define Historic Design Control Districts (HDCDs). HDCD inclusions and boundaries shall be determined in a manner consistent with National Historic Preservation Act (NHPA) Historic District standards.

A. The County shall develop design guidelines for each HDCD. These guidelines shall be compatible with NHPA standards.

B. New buildings and structures and reconstruction/restoration of historic (historic as per National Register of Historic Places [NRHP] and California Register of Historical Resources [CRHR] criteria) buildings and structures shall generally conform to styles of architecture prevalent during the latter half of the 19th century into the first decade of the 20th century.

C. Any historic building or structure located within a designated HDCD, or any building or structure located elsewhere in the county that is listed on the NRHP or CRHR, is designated a California Building of Historic Interest, or a California State Historic Landmark, or is designated as significant as per NRHP/CRHR criteria, shall not be destroyed, significantly altered, removed, or otherwise changed in exterior appearance without a design review.

D. In cases where the County permits the significant alteration of a historic building or structure exterior, such alteration shall be required to maintain the historic integrity and appearance of the building or structure and shall be subject to a design review.

E. In cases where new building construction is placed next to a historic building or structure in a designated HDCD or listed on the CRHR/NRHP, the architectural design of the new construction shall generally conform to the historic period of significance of the HDCD or listed property.

F. In cases where the County permits the destruction of a historic building or tearing down a structure, the building or structure shall first be recorded in a manner consistent with the standards

of the NHPA Historic American Building Survey (HABS) by a qualified professional architectural historian.

G. The County shall mandate building and structure design controls within the viewshed of the Marshall Gold Discovery State Historic Park. These design controls shall be consistent with those mandated for designated Historic Design Control Districts.

Policy 7.5.2.3: New buildings and reconstruction in historic communities shall generally conform to the types of architecture prevalent in the gold mining areas of California during the period 1850 to 1910.

Policy 7.5.2.4: The County shall prohibit the modification of all National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listed properties that would alter their integrity, historic setting, and appearance to a degree that would preclude their continued listing on these registers. If avoidance of such modifications on privately owned listed properties is deemed infeasible, mitigation measures commensurate with NRHP/CRHR standards shall be formulated in cooperation with the property owner.

Policy 7.5.2.5: In cases where the County permits the demolition or alteration of an historic building, such alteration or new construction (subsequent to demolition) shall be required to maintain the character of the historic building or replicate its historic features.

Objective 7.5.3: Recognition of Prehistoric/Historic Resources—Recognition of the value of the County's prehistoric and historic resources to residents, tourists, and the economy of the County, and promotion of public access and enjoyment of prehistoric and historic resources where appropriate.

3.5.4 Methods and Significance Criteria

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of cultural resources impacts:

a) substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
b) substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
c) direct or indirect destruction of a unique paleontological resource or site or unique geologic feature; and/or
d) disturb any human remains, including those interred outside of formal cemeteries.

Substantial adverse changes to a significant cultural resource would be a significant impact under CEQA. Substantial adverse changes to a significant resource include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings. Mitigation of a substantial adverse change to reduce or avoid the physical impacts typically consists of:

- avoidance and/or preservation in place or

- reduction of the adverse impact through data recovery, including a complete description of the resource, and appropriate curation of the information.

3.5.5 Impacts and Mitigation Measures

Impact 3.5-1: Disturbance or destruction of previously unidentified cultural resources and human remains during construction. (Potentially Significant)

As discussed in Section 3.5.3, no cultural resources have been identified within the Project disturbance area. However, as a result of ground disturbance activities associated with Project construction, the potential exists for disturbance and destruction of cultural resources that may be buried or otherwise currently unidentified within the Project disturbance area. These buried resources could include archeological resources or human remains. Project grading and excavation activities would create a potential for disturbance or destruction of buried cultural resources and human remains. The potential for disturbance and destruction of such resources is considered potentially significant.

Mitigation Measure 3.5-1 accounts for the potential inadvertent discovery of buried cultural resources and human remains during construction. Implementation of this measure would reduce this impact to less than significant.

Mitigation Measures 3.5-1: The County shall incorporate cultural resources and human remains inadvertent discovery programs into construction contract documents.

1) *Project construction contract documents shall specify that in the event that concentrations of subsurface archaeological resources, or materials that have potential to be considered archaeological resources, are encountered during Project construction, County staff shall be notified immediately. All ground-disturbing work in the immediate area shall be suspended. A qualified archaeologist shall be retained by the County to evaluate the materials and recommend appropriate action, if any. Construction shall not recommence until appropriate actions to preserve, excavate or document the resource are completed, as may be necessary depending on the significance of the find.*
2) *Project construction contract documents shall specify that in the event that human remains are found in the study area during earth-moving or other activities, all ground-disturbing work shall be suspended, and the remains shall be treated in a manner consistent with Section 7050.5 of the California Health and Safety Code. The El Dorado County Coroner's Office shall be contacted to determine whether further investigations are warranted, and the remains shall be entrusted to the Coroner who may contact the Native American Heritage Commission and Native American representatives as required or appropriate. Treatment of the remains shall be conducted in accordance with the direction of the County Coroner or the Native American Heritage Commission, as appropriate.*

Significance with Mitigation: Less than Significant

3.6 Geology and Soils

This section describes the geology, soils, and seismicity of the Project area as well as the potential for construction and implementation of the Project to result in effects on these resources.

3.6.1 Summary of the 1992 Bass Lake Road Realignment EIR Geology and Soils Evaluation

The 1992 Bass Lake Road Realignment EIR did not specifically discuss impacts or mitigation measures associated with geology or soils impacts. Water quality and sedimentation impacts were assessed in consideration of potential impacts to wetlands, as discussed in Sections 3.4.1 and 3.8.1 of this Draft SEIR.

3.6.2 Environmental Setting

3.6.2.1 Regional Geology

El Dorado County is located in the Sierra Nevada geomorphic province of California, which is east of the Great Valley province and west of the Range and Basin province. The Sierra Nevada province is characterized by steep-sided hills and narrow, rocky stream channels. This province consists of Pliocene and older deposits that have been uplifted as a result of plate tectonics, granitic intrusion, and volcanic activity. Subsequent glaciation and additional volcanic activity are factors that led to the east-west orientation of stream channels. Figure 3.6-1, "Regional Geology," illustrates geologic formations in the County and the location of the Project site. The southwestern foothills of El Dorado County are composed of rocks of the Mariposa Formation that include amphibolite, serpentine, and pyroxenite. The northwestern areas of the county consist of the Calaveras Formation, which includes metamorphic rock such as chert, slate, quartzite, and mica schist. In addition, limited serpentine formations are located in this area (El Dorado County 2004b).

3.6.2.2 Seismicity

Seismicity is defined as the geographic and historical distribution of earthquakes, or more simply, 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.

Earthquakes are measured either based on energy released (Richter Magnitude scale) or the intensity of ground shaking at a particular location (Modified Mercalli scale). The Richter Magnitude scale measures the magnitude of an earthquake based on the logarithm of the amplitude of waves recorded by seismographs, with adjustments made for the variation in the distance between the various seismographs and the epicenter of the earthquake. This scale starts with 1.0 and has no maximum limit. The scale is logarithmic—an earthquake with a magnitude of 2.0 is 10 times the magnitude (30 times the energy) of an earthquake with a magnitude of 1.0.

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.

3.6.2.3 Fault Systems

Depending on activity patterns, faults and fault-related geologic features may be classified as active, potentially active, or inactive. An active fault is an area where movement has historically taken place over the last 11,000 years (the Holocene Epoch) and where movement can be expected to take place within the next 100 years. These faults that are judged to be capable of ground rupture or shaking pose an unacceptable risk for any proposed structure. Potentially active faults are those faults considered to have been active during the Quaternary time (approximately the last 1.6 million years). All other faults are considered inactive.

Figure 3.6-2, "Regional Fault Zone Systems," illustrates fault zone systems within El Dorado County and the location of the Project site. The distribution of known faults is concentrated in the western portion of the county. Fault systems mapped in western El Dorado County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras–Shoo Fly Thrust.

No active faults have been identified in El Dorado County. One fault, part of the Rescue Lineament–Bear Mountains fault zone, is classified as a well located late-Quaternary fault; and it represents the only potentially active fault in the county. It is part of the Foothill Fault Suture Zone system, which was considered inactive until a Richter scale magnitude 5.7 earthquake occurred near Oroville on August 1, 1975. All other faults located in El Dorado County are classified as pre-Quaternary (inactive).

3.6.2.4 Seismic Hazards

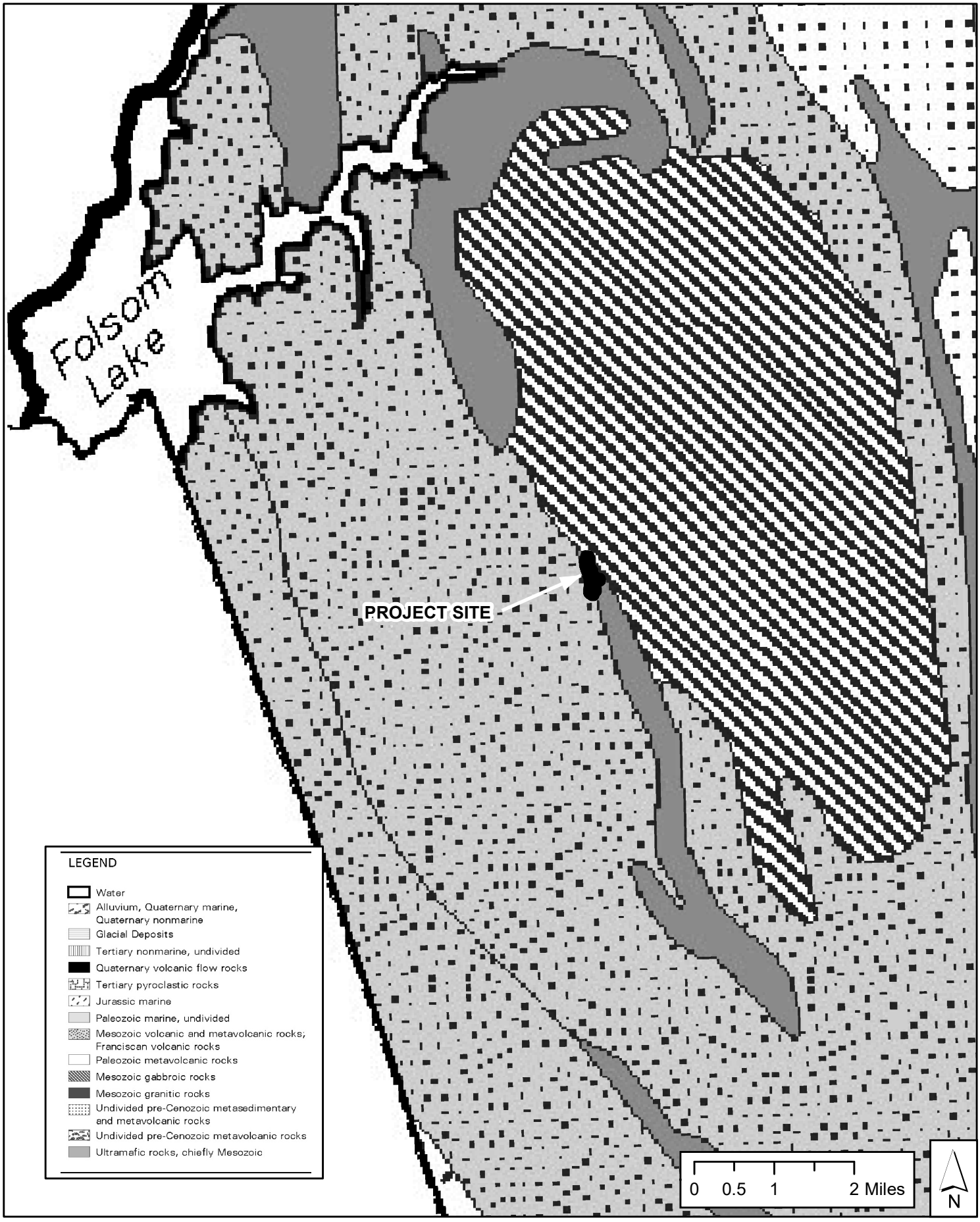
Seismic activity along fault systems poses a substantial hazard to property and human health and safety. Types of hazards that are commonly associated with seismic activity include ground shaking, fault rupture, liquefaction, lateral spreading, landslides/avalanches, and structural hazards. A brief description of these hazards and their applicability to El Dorado County are shown below.

3.6.2.5 Seismic Ground Shaking

Potential ground shaking intensities are depicted in probabilistic seismic hazard maps. The potential intensity of seismic events varies across El Dorado County, generally increasing from west to east, with the highest potential ground shaking intensity located in the Lake Tahoe Basin.

3.6.2.6 Fault Rupture

Fault or surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. Not all earthquakes result in surface rupture. Fault rupture typically occurs along preexisting faults, which represent areas of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep, which is the slow rupture of the earth's crust. Sudden displacements are more damaging to structures because they are accompanied by shaking.



SOURCE: Benchmark Resources 2015
BASE MAP: EDAW 2003

Figure 3.6-1. Regional Geology

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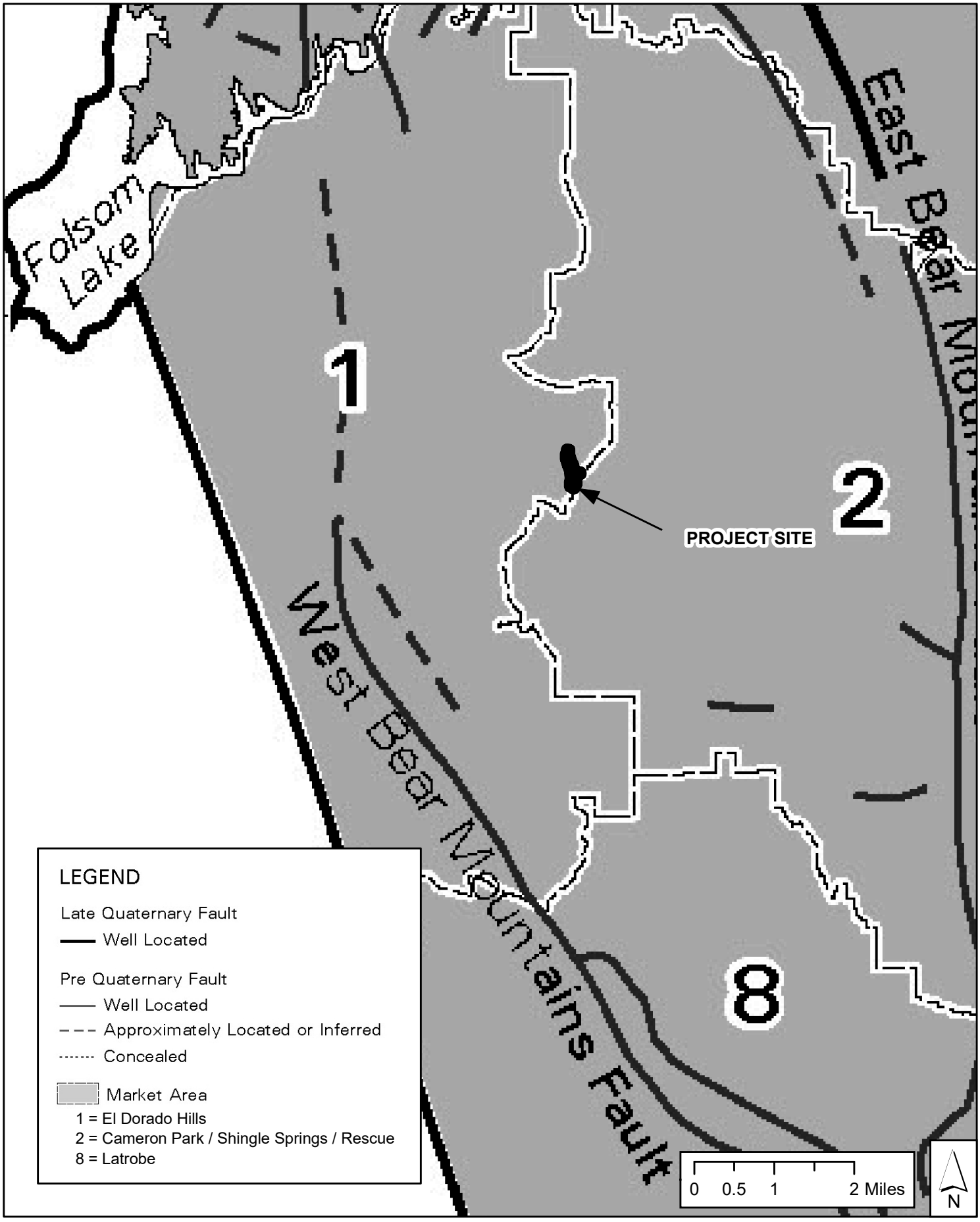

SOURCE: Benchmark Resources 2015
BASE MAP: EDAW 2003

Figure 3.6-2. Regional Fault Zone Systems

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The probability of fault rupture in El Dorado County is based on Earthquake Fault Zone maps prepared by California Geological Survey (CGS) pursuant to the Alquist-Priolo Fault Zoning Act. Earthquake Fault Zones are regulatory zones around active faults. The zones vary in width, but average about one-quarter mile wide. No portion of the county is located within an Alquist-Priolo Earthquake Fault Zone. For more details on the Alquist-Priolo Fault Zoning Act, please refer to the "Regulatory Environment" subsection below.

3.6.2.7 Liquefaction

Liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. This type of ground failure is most likely to occur in water-saturated silts, sands, and gravels having low to medium density. When a soil of this type is subjected to vibration, it tends to compact and decrease in volume. If the groundwater is unable to drain during vibration, the tendency of the soil to decrease in volume results in an increase in pore-water pressure. When the pore-water pressure builds up to the point where it is equal to the overburden pressure (effective weight of overlying soil), the effective stress becomes zero. In this condition, the soil loses its sheer strength and assumes the properties of a heavy liquid.

No portion of El Dorado County is located 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 CGS. Therefore, the Project site is not considered to be at risk from liquefaction hazards.

3.6.2.8 Lateral Spreading

Lateral spreading induced by earthquake shaking may occur as a result of soils moving toward an unsupported surface or slope even though the slope may not be steep. Lateral displacement has occurred in soft saturated clays such as bay and lagoon deposits. During ground shaking, these soft materials may flow, form wave-shape masses, or squeeze laterally. This type of ground failure can also occur beneath fills, with the fill moving and developing severe longitudinal cracks. Lateral spreading is typically associated with areas experiencing liquefaction; because liquefaction hazards are not present in El Dorado County, it can be concluded that the county is not at risk from lateral spreading.

3.6.2.9 Seismically Induced Landslides and Avalanches

Seismic activity may also trigger landslides and avalanches. As indicated above, El Dorado County does not contain any Seismic Hazard Zones. Therefore, the county is not considered to be at risk from seismically induced landslides and avalanches. Non-seismically induced landslides and avalanches are discussed below.

3.6.2.10 Structural Hazards

Structural hazards represent structures that may be unstable in the event of an earthquake. All new structural proposals are reviewed by the County Building Department for seismic loading through the building permit process; this review is based on California Uniform Building Code (UBC) requirements. However, there are older structures in the county that were developed before existing County building code requirements were enacted. Specifically, there are existing

structures that were developed before the enactment of the Riley Act (1933), which prohibits new unreinforced masonry buildings, and the Field Act (1933), which places safety requirements on the construction of public schools. Many of these structures are located in incorporated jurisdictions, such as Placerville, and are not subject to County building requirements. No specific evaluation of the overall condition of these buildings has been made. However, the County has adopted the Uniform Code for the Abatement of Dangerous Buildings, which addresses the structural integrity of older buildings on a case-by-case basis (refer to Regulatory Environment for more information).

3.6.2.11 Landslides

The term landslide includes a wide range of ground movement, such as rockfalls, deep failure of slopes, and shallow debris flows (mudflows). There are many different types of landslides, including translational/rotational slide, earthflow, debris slide, debris flow/torrent track, debris slide/amphitheater slope, and inner gorge. Many factors influence the potential for landslide occurrences, such as geological conditions, drainage characteristics, slope gradient and configuration, vegetation, and removal of underlying support.

3.6.2.12 Site Geology and Potential Geologic Hazards

Due to property access limitations at the time of preparation of this Draft SEIR, site-specific geotechnical evaluations have not been conducted for the Project. Prior to construction and during design, the County would conduct evaluations and address site-specific geologic and soils conditions in the Project design sufficient to avoid risk of damage to Project facilities associated with unstable soils. (See Impact 3.6-3 for additional discussion.)

3.6.2.13 Soils Setting

The Project region's soils are generally very rocky silt loam and are shallow on ridges and deep in valley bottoms. These soils are underlain by metasediment bedrock of the Sierra Nevada Province. The Natural Resources Conservation Service (NRCS) has mapped four soil units on the site (see Figure 3.4-1, "Project Area Soils Distribution," in Section 3.4). The soil units that occur on the site include those listed below with a description of their general characteristics.

- Rescue Clay, Clayey Variant: This poorly-drained soil is found between 500 and 1500 feet in elevation. They are formed by layers of clay and clay loam underlain by igneous rock at a depth of more than 40 inches. These soils are often found in wet drainageways and swales. This soil is not considered prime farmland. The hydric soils list for El Dorado County does not identify this soil type as hydric (NRCS 2014).
- Rescue Sandy Loam, 2 to 9 Percent Slopes: This soil is found between 800 and 2000 feet in elevation. It is a relatively deep, well-drained soil, averaging approximately 66 inches to bedrock. With irrigation, this soil is considered prime farmland. The hydric soils list for El Dorado County does not identify this soil type as hydric (NRCS 2014).
- Rescue Very Stony Sandy Loam, 3 to 15 Percent Slopes: This soil is similar to Rescue Sandy Loam, but typically has more stone and clay intrusions. The bedrock is slightly shallower, typically located between 55 and 50 inches below the surface. This soil is not considered prime farmland. The hydric soils list for El Dorado County does not identify this soil type as hydric (NRCS 2014).

- Serpentine Rock Land: Serpentine rock land is found from 600 to 4,000 feet amsl. It is consists of unweathered serpentine soils with thin surface soils. The hydric soils list for El Dorado County does not identify this soil type as hydric (NRCS 2014).

3.6.3 Regulatory Framework

3.6.3.1 State Regulations

3.6.3.1.1 Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (1972) provides for a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of surface faulting. The purpose of the Act is to prevent the construction of buildings used for human occupancy on or near the surface trace of active faults. Under the statute, the state Division of Mines and Geology (CGS) maintains a mapping program that delineates all active fault traces in the state. These maps are used by professional geologists performing earthquake hazard assessments.

3.6.3.1.2 Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (1990) addresses nonsurface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The act requires the state geologist to delineate seismic hazard zones; counties and cities, which may incorporate this information in their general plans, are required to regulate development in seismic hazard zones.

3.6.3.1.3 California Building Code

The California Building Code (Title 24 of the California Code of Regulations, Part 2) sets requirements and standards for building standards. The California Building Code incorporates by reference the Uniform Building Code (UBC), which is a widely adopted as a model building code in the United States. The California Building Code is adapted for the earthquake hazard zones within the state.

3.6.3.1.4 El Dorado County General Plan

The adopted El Dorado County General Plan (2004) provides Countywide policies for regulating land use, development, and conservation in the County. The General Plan includes policies pertaining to land use in areas where naturally occurring asbestos may be encountered and in areas where seismic and other geologic hazards may be a planning and development concern. The County General Plan's Public Health, Safety, and Noise Element provide the following goals, objectives, and policies (Additional County General Plan policies pertaining to water quality, which also have relevance to soils erosion issues discussed in this section, are included in Section 3.8.2.2 of this EIR which presents General Plan policies pertaining to stormwater and water quality.):

> **Goal 6.3: Seismic and Geologic Hazards—**Minimize the threat to life and property from seismic and geologic hazards.

Objective 6.3.1: Building and Site Standards—Adopt and enforce development regulations, including building and site standards, to protect against seismic and geologic hazards.

Policy 6.3.1.1: The County shall require that all discretionary projects and all projects requiring a grading permit, or a building permit that would result in earth disturbance, that are located in areas likely to contain naturally occurring asbestos (based on mapping developed by the California Department of Conservation [DOC]) have a California-registered geologist knowledgeable about asbestos-containing formations inspect the project area for the presence of asbestos using appropriate test methods. The County shall amend the Erosion and Sediment Control Ordinance to include a section that addresses the reduction of thresholds to an appropriate level for grading permits in areas likely to contain naturally occurring asbestos (based on mapping developed by the DOC). The Department of Transportation and the County Air Quality Management District shall consider the requirement of posting a warning sign at the work site in areas likely to contain naturally occurring asbestos based on the mapping developed by the DOC.

Policy 6.3.1.2: The County shall establish a mandatory disclosure program, where potential buyers and sellers of real property in all areas likely to contain naturally occurring asbestos (based on mapping developed by the California Department of Conservation [DOC]) are provided information regarding the potential presence of asbestos subject to sale. Information shall include potential for exposure from access roads and from disturbance activities (e.g., landscaping).

Policy 6.3.1.3: The County Environmental Management Department shall report annually to the Board of Supervisors regarding new information on asbestos and design an information outreach program.

Objective 6.3.2: County-Wide Seismic Hazards—Continue to evaluate seismic related hazards such as liquefaction, landslides, and avalanche, particularly in the Tahoe Basin.

Policy 6.3.2.1: The County shall maintain updated geologic, seismic and avalanche hazard maps, and other hazard inventory information in cooperation with the State Office of Emergency Services, California Department of Conservation—Division of Mines and Geology, U.S. Forest Service, Caltrans, Tahoe Regional Planning Agency, and other agencies as this information is made available. This information shall be incorporated into the El Dorado County Operational Area Multi-Hazard Functional Emergency Operations Plans.

Policy 6.3.2.5: Applications for development of habitable structures shall be reviewed for potential hazards associated with steep or unstable slopes, areas susceptible to high erosion, and avalanche risk. Geotechnical studies shall be required when development may be subject to geological hazards. If hazards are identified, applicants shall be required to mitigate or avoid identified hazards as a condition of approval. If no mitigation is feasible, the project will not be approved.

3.6.4 Methods and Significance Criteria

This analysis assumes that the construction contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with construction activities and for implementation of any construction-related mitigation measures adopted for the Project. A combination of standard and Project-specific procedures and requirements would be applicable to construction, some of which would be intended to substantially reduce potential environmental effects, including effects related to the geology, soils, and water quality. Among these provisions would be the following:

- Contract special provisions to require compliance with El Dorado County Air Quality Management District Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos
- Contract provisions will require compliance with the El Dorado County Grading Ordinance and Storm Water Management Plan for Western El Dorado County and implementation of Best Management Practices as identified in the National Pollutant Discharge Elimination System permit and/or Storm Water Management Plan.

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of impacts related to geology and soils:

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;
    iii. seismic-related ground failure, including liquefaction; and/or
    iv. landslides.
b) substantial soil erosion or the loss of topsoil;
c) be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
d) be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; and/or
e) have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Regarding item "e," above, the Project would not generate wastewater requiring the use of septic tanks or other wastewater disposal systems, and this issue is therefore eliminated from further consideration.

3.6.5 Impacts and Mitigation Measures

Impact 3.6-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic events or landslides. (Less than Significant)

Fault rupture and associated ground movement would create the potential for damage to road and utility infrastructure and could create instability of cut and fill slopes. The Bear Mountain Fault Zone is the closest area with known faults. The closest fault within the Bear Mountain Fault Zone, the West Bear Mountains Fault, is located approximately 3 miles west Project site and is classified as inactive (Pre-Quaternary greater than 1.6 million years) (Jennings 1994). The maximum credible earthquake would have a magnitude of 6.5 on the Richter Scale. The Project area is not within a mapped Alquist-Priolo Earthquake Hazard Zone. The risk of a seismic event and ground movement of sufficient magnitude to damage Project facilities is considered low.

Project design would incorporate applicable seismic hazard standards, including cut and fill slope compaction and stabilization standards. Design standards would meet the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets. Proper design would reduce the potential for damage resulting from strong ground shaking. Cut and fill slope stabilization and the limited heights and size of such slopes would minimize the potential for slope failure and would not create a substantial risk of landslides. As a result of the low risk of damaging seismic events, the seismic hazard standards that would be included in Project design, and the low risk of landslides this impact is considered less than significant and no mitigation is required.

Impact 3.6-2: Potential to result in substantial soil erosion or the loss of topsoil. (Less than Significant)

Construction activities including vegetation clearing, grading, excavation and fill placement would expose soils susceptible to wind and water erosion. Cut and fill slopes would be susceptible to erosion during and after road construction as would other areas disturbed during construction that are not hard surfaced with either road paving or sidewalk installation.

Erosion would be controlled by best management practices (BMPs) for controlling stormwater runoff that would be identified in the Construction Stormwater Pollution Prevention Plan (SWPPP) that would be prepared for the Project. Stormwater permitting programs regulate stormwater quality from construction sites, which includes erosion and sedimentation. Under the National Pollutant Discharge Elimination System (NPDES) permitting program, the preparation and implementation of a Construction SWPPP is required for construction activities that would disturb an area of 1 acre or more. The SWPPP must identify potential sources of erosion or sedimentation that may be reasonably expected to affect the quality of stormwater discharges as well as identify and implement BMPs that ensure the reduction of these pollutants during stormwater discharges. Typical BMPs for controlling water erosion include sand bags, detention basins, silt fencing, storm drain inlet protection, street sweeping, and monitoring of water bodies. The County's contract

provisions would require compliance with BMPs identified by the NPDES permit and Construction SWPPP as well as policies and regulations regarding erosion and ground instability included in the County's Storm Water Management Plan for Western El Dorado County. These measures would substantially reduce and minimize the potential for soil erosion and loss of topsoil and potential erosion impacts from water erosion are considered less than significant.

Impact 3.6-3: Potential to be located on a geologic unit or soil that could become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and potential to be located on expansive soils that could create risk of damage. (Less than Significant)

It is not anticipated that Project facilities would be susceptible to substantial risk of lateral spreading, subsidence, liquefaction or collapse; however, a detailed investigation of soils and subsurface hydrology has not been conducted to determine specific conditions and potential design measures. Although the potential for liquefaction and related land subsidence activities is not likely to occur within the Project area, the potential presence of fills, subsurface water, and other conditions could result in unstable soil conditions if not properly excavated, drained, and compacted. In addition, the potential for expansion and contraction of soils, including native soils and soils that may be imported as fill material, would create the potential for damage to the roadway structure if not appropriately designed to accommodate these factors. However, as a component of project design, the County would conduct a conduct a geotechnical evaluation that assesses site conditions, soil and geologic characteristics, subsurface hydrology, and other soils and geologic conditions as the Project site. The evaluation would include recommendations pertaining to Project design as necessary to ensure that the Project is designed and constructed as necessary to minimize the potential for slope failure, lateral spreading, subsidence, liquefaction or collapse, or damage associated with potential expansion/contraction of soils. The evaluation would consider and include recommendations pertaining to any soils that may be imported as fill material, and recommended soil stabilization procedures would include those pertaining to excavation and stockpiling, engineered fill replacement and compaction, moisture barriers, and surface and subsurface drainage. Recommendations of the geotechnical evaluation would be incorporated into the final Project design as appropriate. Because the County's design process would include geotechnical studies and design measures appropriate to provide appropriate protection against unstable soils, this impact is considered less than significant and no mitigation is required.

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3.7 Hazards and Hazardous Materials

This section discusses the potential for the Project to result in the use or exposure of hazardous materials and the potential for the Project to create or otherwise introduce other hazards that could pose a substantial risk to human health or life. Other sections of this SEIR also address safety and health issues (e.g., air quality, noise, public safety) and those issues are not reiterated in this section.

3.7.1 Summary of the 1992 Bass Lake Road Realignment EIR Hazards and Hazardous Materials Evaluation

The 1992 Bass Lake Road Realignment EIR did not contain a specific section evaluating potential impacts associated with hazards or hazardous materials.

3.7.2 Environmental Setting

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic—causes human health effects
- Ignitable—has the ability to burn
- Corrosive—causes severe burns or damage to materials
- Reactive—causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The Title 22 of the California Code of Regulations, Sections 66261.20–24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste. In addition, the El Dorado County Environmental Management Department maintains records for toxic or hazardous material incidents, and the Central Valley Regional Water Quality Control Board (RWQCB) maintains files on hazardous material sites.

Most hazardous materials regulations and enforcement in El Dorado County is overseen by the El Dorado County Environmental Management Department, which refers larger cases of hazardous materials contamination or violations to the Central Valley RWQCB and the California Department of Toxic Substances Control (DTSC). Other agencies, such as the El Dorado County Air Quality Management District (EDCAQMD) and the federal Occupational Safety and Health Administrations and California Occupational Safety and Health Administrations (Cal/OSHA), may also be involved when issues related to hazardous materials arise.

3.7.2.1 Site and Surrounding Areas

An environmental site assessment to determine potential site contamination has not been conducted for the Project, but would be performed during the design phase of the Project. DTSC maintains the "EnviroStor Data Management System" (EnviroStor) public website, which provides information on permits and corrective action at hazardous waste facilities, as well as site cleanup projects. A records search of the EnviroStor database was conducted during the preparation of this Draft Subsequent EIR. No sites were identified within the Project site with the nearest over 0.5 mile from the site. A summary of the four nearest sites in EnviroStor is provided below, as reported in EnviroStor.

Sienna Ridge Elementary School Site—Bass Lake Road (approximately 0.5 mile southwest of Project site)

The subject property is located south and east of Bass Lake Road, southwest of Bass Lake, and north of Stone Hill Road and Hound Hollow Drive in El Dorado Hills, El Dorado County, California. The site is a currently undeveloped, irregularly shaped parcel encompassing approximately 16 acres. Site boundaries are generally delineated by the existing Bass Lake Road to the northwest to northeast, rural residential property to the south, undeveloped property to the east and west, an El Dorado Irrigation District equipment yard to the north, and a residential subdivision to the northwest.

The Phase I reported no recognizable environmental conditions exist on the site. However, due to the proximity of the site to known asbestos-containing rock formations, DTSC determined that a Preliminary Environmental Assessment should be conducted to assess the potential for impact to site soils by naturally occurring asbestos. DTSC was notified that the District is considering another potential site.

New Bass Lake K-8 School Site—Greenview-Bass Lake Road & Serrano Parkway (approximately 0.5 mile southwest of Project site)

The subject property is located east of Serrano Drive and north of Greenview-Bass Lake Road in El Dorado Hills, El Dorado County, California. The site is a currently undeveloped, irregularly shaped parcel encompassing approximately 11 acres. Site boundaries are generally delineated by the existing Greenview-Bass Lake Road to the south, undeveloped property to the west, an El Dorado Irrigation District equipment yard to the east, and a residential subdivision to the northwest.

The Phase I reported no recognizable environmental conditions exist on the site. However, because of the proximity of the site to known asbestos-containing rock formations, the District collected soil samples to assess the potential for impact to site soils by naturally occurring asbestos. DTSC was notified of the site after the collection of the soil samples and directed the District to submit the Phase I and soil sample data as a PEA Equivalent report for DTSC's review.

The PEA Equivalent report consists of the March 2009 Phase I report, the June 2009 Geotech Engineering Study and Geo Hazards Assessment report, the August 2011 GeoTech Addendum letter, and the August 2011 School Review letter developed to update the March 2009 Phase I report. The results of the investigation to date indicate no

recognized environmental conditions exist at the site (all asbestos results were below the detection limit), and the recommendation is for no further investigation of the site. DTSC concurred with the recommendation and issued a No Further Action determination on October 13, 2011.

High School No. 5 Site—Green Valley/Bass Lake Road (approximately 1 mile northeast of Project site)

The site is occupied by designated wetlands (3 acres), three seasonal stream, grasslands, oak trees, and other natural vegetation. The site has been historically occupied by natural habitats. The site is located in a known naturally occurring asbestos area. The site occupies about 45 acres of land that was used for cattle grazing. There are no structures on the site. The Pleasant Grove Middle School is adjacent to the northern boundary. In 2005 the District requested the project be made inactive.

Sanford Ranch—2321 Green Valley Road (approximately 1 mile northwest of Project site)

Former potential polychlorinated biphenyls (PCBs) contamination. Site was cleaned by the Pacific Gas and Electric Company in 1984. No further action is required.

3.7.3 Regulatory Framework

3.7.3.1 Federal

3.7.3.1.1 Resource Conservation and Recovery Act

The 1976 federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and nonhazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

3.7.3.1.2 Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 introduced active federal involvement to emergency response, site remediation, and spill prevention. CERCLA was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The act addresses environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, CERCLA establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

3.7.3.2 State

3.7.3.2.1 California Health and Safety Code

The California Environmental Protection Agency (Cal/EPA) has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Sections 25531, et seq. incorporate the requirements of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan. The Risk Management Plan must be submitted to the appropriate local authorities, the designated local administering agency, and the Cal/EPA for review and approval.

3.7.3.2.2 Cal/OSHA Lead in Construction Standard

The Cal/OSHA Lead in Construction Standard requires the use of special work practices during the disturbance of paint with any detectable amounts of lead. Waste materials with a concentration greater than 0.1 percent or 1,000 parts per million (ppm) for total lead are considered hazardous waste in California. Waste materials with a total lead concentration between 0.005 percent (50 ppm) and 0.10 percent (1,000 ppm) must be re-analyzed using the waste extraction test method to determine the soluble lead content for waste disposal requirements. Additionally, waste material containing greater than 0.035 percent (350 ppm) lead is subject to disposal restrictions according to California Health and Safety Code Section 2515 7.8. Contractors are also required to notify the Division of Occupational Safety and Health prior to disturbing greater than 100 square feet or l00 linear feet of material containing lead greater than 0.5 percent by weight, 5,000 ppm, or 1.0 milligram per square centimeter.

3.7.3.3 Local

3.7.3.3.1 El Dorado County General Plan

The adopted County General Plan (El Dorado County 2004) provides Countywide policies for regulating land use, development, and conservation in the County. The General Plan includes policies pertaining to land use in areas where naturally occurring asbestos may be encountered and in areas where seismic and other geologic hazards may be a planning and development concern. The County General Plan Public Health, Safety, and Noise Element provide the following goals, objectives, and policies associated with hazards and hazardous materials with potential relevance to the Project. Additional goals, objectives, and policies also related to health or safety hazards are discussed in other sections of this Draft SEIR.

Goal 6.6: Management of Hazardous Materials—Recognize and reduce the threats to public health and the environment posed by the use, storage, manufacture, transport, release, and disposal of hazardous materials.

Objective 6.6.1: Regulation of Hazardous Materials—Regulate the use, storage, manufacture, transport and disposal of hazardous materials in accordance with State and Federal regulations.

Policy 6.6.1.2: Prior to the approval of any subdivision of land or issuing of a permit involving ground disturbance, a site investigation, performed by a

Registered Environmental Assessor or other person experienced in identifying potential hazardous wastes, shall be submitted to the County for any subdivision or parcel that is located on a known or suspected contaminated site included in a list on file with the Environmental Management Department as provided by the State of California and federal agencies. If contamination is found to exist by the site investigations, it shall be corrected and remediated in compliance with applicable laws, regulations, and standards prior to the issuance of a new land use entitlement or building permit.

3.7.3.3.2 El Dorado Air Quality Management District

All friable asbestos-containing materials (ACM), or nonfriable ACM subject to damage, must be abated prior to demolition in accordance with El Dorado Air Quality Management District requirements. Friable ACM must be disposed of as an asbestos waste at an approved facility. Nonfriable ACM may be disposed of as nonhazardous waste at landfills that will accept such wastes.

3.7.4 Methods and Significance Criteria

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of impacts associated with hazards and hazardous materials:

a) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
b) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
c) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
d) be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
e) for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
f) for a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
g) impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
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.

Potential impacts associated with issues listed at items a through c, g, and h, above, are addressed in Section 3.7.5, below. Regarding item d, a search of the Hazardous Waste and Substances Site

List using the EnviroStor database on March 22, 2015 determined that no such sites are listed in postal (zip) codes in the vicinity of the Project site (95762, 95672, and 95682). Regarding items e and f, the Project is located approximately 1.5 miles west of the Cameron Airport (a public-use airport, Federal Aviation Administration Identifier: O61); however, the Project would not result in a safety hazard associated with the airport. Therefore, no potential for significant impacts associated with issues listed at items d, e, or f would occur and these issues have been eliminated from further consideration.

3.7.5 Impacts and Mitigation Measures

Impact 3.7-1: Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

Construction of the Project would require the use of commonly used hazardous materials such as fuels, lubricants and battery acids for construction vehicles and equipment, cleaners and solvents necessary for maintenance of equipment, roadway resurfacing and striping materials, and other commonly used hazardous materials. These materials would only be used during construction of the Project and would not be retained on-site following completion of construction activities. Use, storage, and disposal of hazardous materials are regulated by numerous local, state and federal laws aimed at reducing the potential worker, public and environmental health threat posed by such materials. Construction contractors would be required to comply with all such applicable laws.

Hazardous materials would be transported to the Project area according to applicable hazardous materials transport and handling laws and regulations, and would only be stored in proper containers within a secured construction staging area. Hazardous wastes including used oil, used oil filters, used gasoline containers, spent batteries, and other items would be collected regularly and disposed in accordance with all applicable laws and regulations. In addition, Project construction would incorporate spill prevention and response measures. Because of the minimal threat of potential accidental exposure to workers and the public that would result through compliance with applicable laws and regulations and implementation of spill prevention and response measures, this impact is considered less than significant.

Impact 3.7-2: Potential to 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. (Potentially Significant)

Clearing, grading and other ground disturbing activities would create the potential for disturbance to currently unidentified contaminated soils that may exist within the Project area. Hazardous materials have not been identified within areas that would be disturbed during construction activities. However, the potential for unknown/unidentified hazardous materials to be present within areas to be disturbed during construction creates a potential for their disturbance. Disturbance of such materials could result in their release into the environment as airborne or waterborne pollutants which could pose a risk to workers or the general public in or adjacent to construction areas. This increased risk is considered to be a potentially significant impact of the Project. (Potential disturbance of naturally occurring

asbestos and County regulations pertaining to the control of potential release of naturally occurring asbestos are discussed separately in Section 3.3 of this Draft SEIR.)

Mitigation Measure 3.7-2 requires the County to conduct a Phase 1 Environmental Site Assessment (ESA) of the Project site to determine the potential presence of hazardous materials or soils contamination and to implement appropriate remediation measures depending on the findings of the Phase 1 ESA. Implementation of Mitigation Measure 3.7-2 would reduce this impact to less than significant.

Mitigation Measure 3.7-2: ***The County shall conduct a Phase 1 ESA of the Project study area and shall implement appropriate remediation to ensure worker and public safety in the event that hazardous materials or conditions are identified.***

Prior to the initiation of construction activities for the Project, the County shall conduct a Phase 1 Environmental Site Assessment (ESA) to determine the potential presence of hazardous materials or substances within the Project site. In the event that the Phase 1 ESA identifies the presence or potential presence of hazardous materials or substances, the County shall develop a remedial action plan to remove and properly dispose of contaminated soils or other hazardous conditions. All such remediation shall be conducted in accordance with federal, state and local laws pertaining to the use, handing, transportation and disposal of hazardous materials. No other Project-related construction activities shall occur on the site until appropriate remediation has occurred.

Significance with Mitigation: Less than Significant

Impact 3.7-3: Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant)

Existing schools nearest to the Project site are Green Valley Elementary School and Pleasant Grove Middle School, both located to the north of the site. Pleasant Grove Middle School is approximately 0.5 mile north of the northernmost potential construction staging area (#3). Project handling of hazardous materials would be limited to the minimal amounts of fuels and other commonly used materials during construction. Construction activities and the use of these materials would not take place within one-quarter mile of an existing school.

Impact 3.7-4: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

The majority of the activities associated with constructing the Project would take place in an area where very limited motor vehicle travel presently occurs (private access for three residential properties along Sandhurst Hill Road). However, construction activities on the Project segment of Bass Lake Road may require traffic controls, temporary lane closures, and/or traffic lane diversions to ensure safe and efficient movement of vehicles, bicyclists and pedestrians during construction.

As discussed in Chapter 2, construction contract provisions would require that a Traffic Management Plan be prepared. The Traffic Management Plan would include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic during construction. If full roadway closures are necessary during Project construction, provisions for emergency vehicle movement through the Project area will be provided at all times during construction. Any temporary traffic diversions, lane closures or detours would be properly signed; and barriers, striping, and cones would be used as necessary to guide traffic and delineate temporary routes. Flagpersons would monitor and guide traffic during periods of equipment movement or when construction activities were occurring near traffic lanes to ensure public and worker safety. If full roadway closures are necessary during Project construction, provisions for emergency vehicle movement through the Project area will be provided at all times during construction.

Project construction activities would be coordinated with local law enforcement and emergency services providers. As a result of this coordination, law enforcement and emergency service providers would be aware of Project construction and the potential for any emergency vehicle movement delays within the Project area and measures to avoid such delays would be determined and implemented. It is anticipated that a minimum of one travel lane would be maintained on Bass Lake Road during construction.

In the unlikely event of a need for emergency evacuation within the region not associated with the Project (e.g., a wildland fire threatening residences in areas northeast of the Project site), a route through the Project construction area could be provided for evacuation. Therefore, the potential for short-term construction impacts to emergency vehicle response and evacuation is considered less than significant. Once constructed, the Project would provide additional and improved vehicle routing options that would provide a benefit to emergency vehicle access and response within the region.

Impact 3.7-5: Potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires. (Potentially Significant)

The California Department of Forestry and Fire Protection (CAL FIRE) maps fire hazard ratings within State Responsibility Areas (SRA). The ratings are based on factors such as fuels, terrain, and weather, and are described according to their potential for causing ignitions to buildings. The Project site is within an SRA and is designated as having "Moderate" fire hazard (CAL FIRE 2007). Moderate fire hazard potential is lowest of three ratings (i.e., Moderate, High, and Very High) used in the program.

Project-related vehicle and equipment use during construction within or adjacent to areas with vegetation that could serve as fuel for wildland fire would introduce wildland fire ignition sources including sparks from internal combustion engines, heat from exhaust piping on construction vehicles and equipment, and improper disposal of construction worker cigarettes. During dry periods, the spread of wildfire could be rapid, depending on the location and atmospheric conditions, including humidity and wind speed/direction.

Wildland fire resulting from Project activities would create the potential for impacts to biological resources as well as air pollution, and presents a potentially significant risk to

property and human health and life. Mitigation Measure 3.7-5 requires that fire ignition prevention measures and an emergency fire response plan be implemented during the construction period. Implementation of Mitigation Measure 3.7-5 would reduce this potential impact to less than significant.

Once constructed, the new Silver Springs Parkway would result in vehicle and pedestrian travel through areas where no through-travel currently occurs. Although there is a small potential that these uses could introduce indirect fire ignition sources (e.g., improper disposal of cigarettes in adjacent vegetation). However, the Project would reduce the area within the Project site subject to wildland fire as a result of vegetation clearing, paving, and creation of other non-vegetated areas. The Project is not considered to result in a substantial long-term potential for contributing to wildland fire risk.

Mitigation Measure 3.7-5: ***Implement fire ignition prevention measures and an emergency fire response and notification plan during construction.***

Construction contractors shall be required to develop and implement specific fire ignition prevention measures, including, but not limited to, the following measures:

a) Use properly working spark arrestors, heat shields, and other ignition source controls on vehicles and equipment.

b) Remove vegetation from within potential construction staging areas when near potential ignition sources.

c) Implement smoking prohibitions within high risk areas and provide cigarette disposal options for workers.

d) Provide worker education related to minimizing fire ignition sources and for emergency response.

e) *Develop a fire response program that includes emergency fire suppression and emergency response services notification provisions.*

Significance with Mitigation: Less than Significant

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3.8 Hydrology and Water Quality

This section describes the existing hydrology and water quality of the Project area and the potential for construction and use of the Project to result in effects on surface and groundwater hydrology and water quality. The analysis and other information presented in this section is based on input provided by EMKO Environmental during the preparation of this Draft SEIR. Information for this analysis was obtained through several sources cited herein, including a drainage report prepared for the Project entitled, "*Drainage Report Silver Springs Parkway—Offisite"* (Stantec 2008), which is included as Appendix F of this Draft SEIR.

3.8.1 Summary of the 1992 Bass Lake Road Realignment EIR Hydrology and Water Quality Evaluation

The 1992 Bass Lake Road Realignment EIR considered potential water quality impacts in terms of potential effects to wetlands. The analysis identified that stormwater runoff from completed roadways would carry transportation-related pollutants, such as gasoline, oil, grease and certain heavy metals, from roadways into area stream or drainage courses and could adversely affect water quality and wetland vegetation. The analysis also identified that during construction, runoff from disturbed areas would likely contain silt and debris and result in short-term increases in the sediment load of project area runoff and that fuel leaks or spills of other potentially harmful substances on the project site could be introduced to local stream courses in project area runoff. The analysis found that the significance of these potential impacts would vary depending on the level of construction activity, weather conditions, soil conditions, and the characteristics of the affected watercourse. The analysis concluded that although the level of impact from increased sedimentation and/or contamination of area waterways could not be precisely determined, mitigation measures would reduce the impact to a less-than-significant level. The 1992 EIR identified five mitigation measures associated with wetlands impacts. Mitigation Measures G-1, G-2, and G-3 pertained specifically to wetlands habitat (those three measures were subsequently modified through a 2001 addendum to the 1992 EIR, as discussed in Section 3.4.1). Mitigation Measures G-4 and G-5 pertain to water quality and are as follows:

> **1992 EIR Mitigation Measure G-4:** *Site-specific erosion and drainage control measures shall be developed and implemented as part of future roadway construction. Measures include, but are not limited to, limiting removal of vegetation around construction areas, minimizing exposure of bare soils, replanting disturbed soils with suitable native species, controlling runoff, preventing sedimentation from entering drainages, and limiting construction to dry seasons.*
>
> **1992 EIR Mitigation Measure G-5.** *Equipment fueling and chemical storage areas shall be sited away from active stream courses.*

3.8.2 Environmental Setting

3.8.2.1 Climate

The Project area is in a Mediterranean climate zone with hot dry summers and cool wet winters. Most of the precipitation falls as rain between October and April. The average annual precipitation is 28 inches (Stantec 2008). The average annual pan evaporation rate is about 60

inches (DWR 1975). High intensity, long duration rain storms are common during the fall and winter and are the main source of runoff within the Project area. High intensity, short duration thunderstorms occur infrequently during the summer.

3.8.2.2 Surface Water Hydrology

The Project study area is within the Sacramento River Hydrologic Region, in the American River Hydrologic Unit in the South Fork American River watershed.

The South Fork American River watershed encompasses the central region of the County, extending from the headwaters of the Sierra crest (9,900-foot elevation), west to its terminus at Folsom Lake (480-foot elevation). Folsom Lake is a source of drinking water for El Dorado County, Sacramento County, and the City of Folsom. Downstream of Folsom Lake, flows from the American River discharge into the Sacramento River in the City of Sacramento. Major tributaries contributing flow directly into the South Fork of the American River include the North Fork of the American River, Silver Creek, Slab Creek, Rock Creek, and Weber Creek. Upstream tributaries are Caples Creek, South Fork Silver Creek, and Jones Fork Silver Creek.

The sources of surface water within the Project vicinity include stormwater runoff, irrigation water runoff (primarily irrigation associated with residential yard irrigation), and spring discharges of subsurface waters (see below for discussion of groundwater hydrology). Surface water within the Project vicinity generally drains in a northwest direction by means of a combination of natural drainages, modified drainages, and culverts. Downstream of the site, surface water flows through local drainages to join Allegheny Creek, which flows into New York Creek, which drains into Folsom Lake.

A small pond with an area of approximately 0.58-acre (Stantec 2008) is located near the north end of the Project site. This pond receives stormwater runoff from sheet flow and small local drainages. The watershed area for this pond covers approximately 100 acres (Stantec 2008) and is located to the east, south, and west of the pond. Drainage from the pond flows north to the northern edge of the Project site and then flows toward the northwest. Field observations and aerial photograph review indicate that this pond contains water through the dry season. Similar conditions are observed at Bass Lake, which was formerly owned and operated by the El Dorado Irrigation District (EID). EID staff have observed that Bass Lake has continued to contain water over the last three dry years even though it has a small watershed and water has not been pumped into the lake since at least 2011 (Mary Lynn Carlton, personal communication, July 15, 2014). EID staff state that “unless there is some groundwater contribution, it’s hard to explain why the reservoir hasn’t gone dry during the last three dry years.” (Mary Lynn Carlton, personal communication, July 15, 2014). Further discussion of the potential groundwater contribution to Bass Lake and the small pond on the Project site is presented in Section 3.8.2.3, below.

3.8.2.3 Groundwater

The County is within the Central Nevada geomorphic province with groundwater located primarily in hard rock aquifers. Water can be found in stress fractures, joints, faults, and fractures caused by heating and cooling in volcanic rock. The highest groundwater yields occur at shallow depths where fracturing is greatest. Groundwater movement is influenced by characteristics of the fracture system including the size and location of fractures, interconnection

between fractures, and existing materials within the fracture. Recharge, movement, and storage of water in fractures of hard rock are limited. Therefore, the long-term reliability of groundwater cannot be estimated with the same level of confidence as a porous or alluvial aquifer such as that in the Central Valley of California (DWR 1989, 1990; USGS 1983). Based on this information, the characteristics and depth of the groundwater in the Project study area are difficult to predict. However, the presences of springs in the area indicates the occurrence of shallow groundwater beneath the Project site, at least in the area of the shallow pond discussed above in Section 3.8.2.2.

Conditions observed at Bass Lake, located to the west of the Project site, in August 2013 were used to estimate the potential rate of groundwater discharge from springs to surface water features in the area. August 2013 was selected for this evaluation because EID had not pumped water into Bass Lake that year yet aerial photographs indicate that the lake still had a surface area of about 35 acres late in the dry season. In the 2012-2013 wet season, approximately 18 inches of rain fell in the area, as reported at Folsom Dam). Thus, approximately 52.5 acre-feet of rain fell directly on Bass Lake. The watershed area surrounding Bass Lake encompasses about 95 acres. Using the same methodology as Stantec (2008), the runoff from the watershed into Bass Lake during the 2012-2013 wet season was approximately 35.5 acre-feet. Thus, a total of 88 acres of stormwater either falling directly on the lake surface or as runoff from within the watershed entered Bass Lake during the 2012-2013 wet season.

Based on a pan evaporation rate of 60 inches per year (see Section 3.8.2.1, above), and a lake evaporation factor of 70 percent of the pan evaporation rate (DWR 1979), the evaporation from Bass Lake from September 2012 to August 2013 was approximately 122 acre-feet, or about 34 acre-feet greater than the rainfall amount. Therefore, for the lake to retain its size and not dry out due to evaporation, it can be reasonably estimated that about 34 acre-feet of groundwater entered the lake through spring flow. This equates to a spring flow rate equivalent to 0.36 acre-feet if inflow per acre of perimeter watershed area.

Assuming that groundwater movement within the area of the small pond within the Project site is similar to that of the Bass Lake watershed and given that the perimeter watershed area for the small pond near the north end of the Project site is 100 acres, annual spring discharge of groundwater into the pond can be estimated to be approximately 36 acre-feet per year. Since the pond is very small (0.58 acre), most of the spring flow into the pond likely results in surface discharge from the pond. Assuming that the spring discharge is relatively consistent throughout the year, the average discharge rate of springflow from the pond is about 0.05 cubic feet per second (cfs).

3.8.2.4 Flooding

Flooding results when water flow cannot be contained within the banks of natural or manmade drainage courses. Flooding can be caused by an excessive storm event, snowmelt, blockage of watercourse, dam failure, or combination of these or other events. A flood event can cause injury or loss of property, such as the flooding of structures including homes and businesses; uplift vehicles and other objects; damage roadways, bridges, infrastructure, and public services; and cause soil instability, erosion, and landsliding. Pursuant to the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) develops flood risk data for use in insurance rating and floodplain management. Based on these data, FEMA prepares Flood

Insurance Rate Maps that delineate areas that are subject to inundation from a 100-year flood event (i.e., a flood that has a 1 percent chance of occurring in a given year) (FEMA 1988).

Because of a lack of extensive low-lying areas and a great deal of upland areas, the majority of El Dorado County is not subject to flooding. Review of the FEMA Flood Insurance Rate Map that includes the Project site, indicates that no flood hazard areas are designated for the Project site or downstream areas. Bass Lake and the small pond area to the east of Bass Lake area identified as Special Flood Hazard Areas subject to inundation by the 1% annual chance of flood, with no base flood elevation determined. These features are not within the Project site and do not receive water runoff from the Project site.

3.8.2.5 Water Quality

In general, water quality depends primarily on the hydrologic characteristics of the surrounding water basin, mineral composition of the soils in the watershed, and sources of contamination in the watershed. The quality of stormwater varies greatly depending on climatic and land use conditions. Urban and industrial runoff is known to contribute significantly to the levels of toxic materials such as metals and organic pesticides transported to surface bodies of water. Stormwater discharges may contain unacceptable levels of total petroleum hydrocarbons such as gasoline and diesel, oils, brake material, organic material, pesticides, heavy metals (copper, lead, cadmium, and zinc), fertilizers, trash, and sediment.

Water in the environment is recirculated through the hydrological cycle. As water moves through the system, the quality of the water is continuously changed by physical processes. In addition, the composition of geologic materials that the water encounters can affect the water quality. Some processes, such as filtration through surface soils and within aquifers, tend to change the quality of the water. All of these changes are temporary. The relative quality of surface water and groundwater at any given time and location reflects the balance of the pollutant loading and the ability of the system to treat or purify the water. If the pollutant loading exceeds the ability of the system to assimilate pollutants, then water quality problems may occur. In general, the encroachment of development tends to increase the pollutant loading, while simultaneously reducing the ability of the natural system to assimilate pollutants.

Pursuant to Section 303(d) of the federal Clean Water Act (CWA), states, territories and authorized tribes are required to develop lists of water quality limited segments or surface water bodies that do not meet water quality standards due to high levels of pollutants. Stormwater discharge can carry pollutants from a variety of sources into associated surface water bodies. Project runoff would discharge to the South Fork of the American River. The following beneficial uses for the South Fork of the American River between Placerville and Folsom Lake are listed in the Water Quality Control Plan for the Central Valley Region (Central Valley RWQCB 2010):

- Municipal and domestic supply (MUN);
- Agricultural supply (AGR);
- Power generation (POW);
- Water contact recreation 1 and 2 (REC-1 and REC-2);
- Cold freshwater habitat (COLD);

- Warm freshwater habitat (WARM); and
- Wildlife habitat (WILD).

According to the Water Quality Control Plan (Central Valley RWQCB 2010), the suspended sediment load and suspended sediment discharge rate of these surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

No water bodies are in the Project area listed on the 2010 CWA 303(d) list of impaired water bodies. Furthermore, none of the tributaries within the Project study area are listed on the 2010 CWA 303(d) list of impaired water bodies. Therefore, no Total Maximum Daily Load requirements are in effect for any surface water bodies in or adjacent to the Project site (SWRCB 2008). The nearest water body on the 2010 CWA 303(d) list is the South Fork of the American River from Slab Creek to Folsom Lake for mercury (Final 2010 Integrated Report (CWA Section 303(d) List/305(b). Report available online at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/category5_report.shtml, accessed 4-13-2015).

3.8.3 Regulatory Framework

3.8.3.1 Federal

3.8.3.1.1 Clean Water Act

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Water quality standards consist of beneficial uses of the waters to be protected, water quality objectives to protect the designated beneficial uses, and a program of implementation needed for achievement of water quality objectives. Beneficial uses are the types of activities for which the receiving water may be protected, and include, but are not limited to, municipal supply, agricultural and industrial supply, recreation, and preservation and enhancement of fish, wildlife, and other aquatic resources. Water quality objectives are the numeric or narrative water quality levels established for the reasonable protection of the beneficial uses and the prevention of nuisance. (See further description of California Porter-Cologne Water Quality Control Act, below.)

Section 402 of the CWA establishes the NPDES permit program, and section 301 of the CWA prohibits discharges of pollutants to waters of the United States without first obtaining an NPDES permit. Section 402(p) prescribes requirements for certain types of stormwater discharges, and the State Water Resources Control Board (SWRCB) implements these requirements in NPDES stormwater permits. Construction activities that disturb land equal to or greater than 1 acre must comply with the SWRCB's General Permit for Discharges of Storm Water Associated with Construction Activity, SWRCB Order No. 99-08-DWQ, (General Permit), which was revised by the SWRCB on September 2, 2009, and adopted as Order 2009-0009-DWQ.

Implementation and enforcement of the General Permit is overseen by the nine Regional Water Quality Control Boards (RWQCBs). The Project site is within the boundaries of the Central Valley RWQCB. Where construction activity disturbs 1 or more acres, the General

Permit requires all dischargers of stormwater associated with construction activity to take the following measures:

1) Develop and implement a SWPPP, which specifies best management practices (BMPs) that will minimize or prevent pollutants associated with construction activity from contacting stormwater and with the intent of minimizing sediment from moving off-site into receiving waters.
2) Eliminate or reduce nonstormwater discharges to storm sewer systems and other waters of the United States.
3) Perform inspections of all BMPs.

To obtain coverage, the landowner must file a Notice of Intent (NOI) with the SWRCB, and certify compliance with the requirements listed above. When Project construction is completed, El Dorado County must file a notice of termination.

3.8.3.1.2 Federal and State Antidegradation Policies

The federal antidegradation policy directs the State to develop and adopt a statewide antidegradation policy, consistent with the following principles:

- Existing instream water use and level of water quality necessary to protect the existing uses shall be maintained and protected.
- Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.
- In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources, and all cost-effective and reasonable best management practices for non-point source control.
- Where high-quality waters constitute an outstanding national resource, such as waters of National and State Parks and wildlife refuges and waters of exceptional recreational or ecological significance, water quality shall be maintained and protected.

In accordance with the federal antidegradation policy principles excerpted above, the SWRCB adopted SWRCB Res. No. 68-16, setting forth California's antidegradation policy. Resolution 68-16 states, in part, Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

Where high quality waters exist, the State antidegradation policy requires discharges to meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

3.8.3.2 State

3.8.3.2.1 Porter-Cologne Water Quality Control Act

The California Porter-Cologne Water Quality Control Act of 1969 authorized the SWRCB to provide comprehensive protection for California's waters through water allocation and water quality protection. The Porter-Cologne Act was later amended to authorize the SWRCB and nine RWQCBs to issue NPDES permits under the CWA via authority delegated from the EPA. The SWRCB implements the requirements of the CWA and the Porter-Cologne Act by adopting statewide Water Quality Control Plans that prescribe applicable water quality standards to specified water bodies. The Porter-Cologne Act also established the responsibilities and authorities of the nine RWQCBs, which include preparing regional Water Quality Control Plans, promulgating regional water quality standards, and issuing NPDES permits and the state-equivalent Waste Discharge Requirements (WDRs), among other regulatory orders.

3.8.3.3 Local

3.8.3.3.1 El Dorado County General Plan

The adopted El Dorado County General Plan (2004) provides County wide policies for regulating land use, development, and conservation in the County. Policies related to erosion and sedimentation, water quality, and drainage are contained the Conservation and Open Space Element. General Plan objectives and policies pertinent to the water resources analysis are listed below. Appendix G, "Silver Springs Parkway to Bass Lake Road (South Segment) - El Dorado County General Plan Policy Consistency Review," of this Draft SEIR provides a matrix that lists the policies determined to have relevance to this Project and provides a summary of the County's determination of Project consistency with each relevant goal and policy.

Objective 7.1.2: Erosion/Sedimentation—Minimize soil erosion and sedimentation.

Policy 7.1.2.1: Development or disturbance shall be prohibited on slopes exceeding 30 percent unless necessary for access. The County may consider and allow development or disturbance on slopes 30 percent and greater [under certain conditions].

Policy 7.1.2.2: Discretionary and ministerial projects that require earthwork and grading, including cut and fill for roads, shall be required to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.

Policy 7.1.2.3: Enforce Grading Ordinance provisions for erosion control on all development projects and adopt provisions for ongoing, applicant-funded monitoring of project grading.

Policy 7.1.2.5: The Department of Transportation, in conjunction with the Resource Conservation Districts and Soil Conservation District, shall develop a road-side maintenance program to manage roads in a manner that maintains drainage and protects surface waters while reducing road-side weed problems.

Objective 7.3.1: Water Resource Protection—Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.

Policy 7.3.1.1: Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.

Objective 7.3.2: Water Quality—Maintenance of and, where possible, improvement of the quality of underground and surface water.

Policy 7.3.2.1: Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.

Policy 7.3.2.2: Projects requiring a grading permit shall have an erosion control program approved, where necessary.

Policy 7.3.2.3: Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).

Objective 7.3.4: Drainage—Protection and utilization of natural drainage patterns.

Policy 7.3.4.1: Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.

Policy 7.3.4.2: Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.

3.8.3.3.2 El Dorado County Municipal Code

The El Dorado County Municipal Code provides County wide standards for development, in the County. Issues related to erosion and sedimentation, water quality, and drainage pertinent to the water resources analysis as presented below:

Chapter 15.14, "Grading Erosion and Sediment Control." This Chapter is enacted for the purpose of regulating grading within the unincorporated area of El Dorado County to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses; and to ensure that the intended use of a graded site is consistent with the El Dorado County General Plan, any Specific Plans adopted thereto, the adopted Storm Water Management Plan, California Fire Safe Standards and applicable El Dorado County ordinances including the Zoning Ordinance and the California Building Code.

This Chapter is not intended to supersede or otherwise preempt any applicable local, state, or federal law or regulation. Where conflicts may occur between this Chapter and such laws or regulations, the most restrictive shall apply.

3.8.3.3.3 County of El Dorado Drainage Manual

The County of El Dorado Drainage Manual (1995) provides guidelines for drainage improvements that are intended to supplement the provisions of the Grading, Erosion and Sediment Control Ordinance and the Design and Improvement Standards Manual. Specifically, the Drainage Manual is intended to provide consistent, specific criteria and guidelines regarding the design of storm drainage facilities and the management of stormwater in El Dorado County. The design criteria provided in the Drainage Manual pertain to hydrologic, hydraulic, and structural design.

3.8.3.3.4 Storm Water Management Plan

The Storm Water Management Plan (SWMP) for Western El Dorado County (El Dorado County 2004a) regulates the water quality issues associated with this Project. The SWMP describes the program intended to reduce the discharge of pollutants associated with stormwater drainage systems that serve Western El Dorado County. According to Sections 4.4 and 4.5 of the SWMP, the County complies with State Water Resources Control Board's stormwater discharge permit requirements by incorporating stormwater runoff control into the County's design process and construction compliance inspection. These stormwater permit requirements are established in the Board's statewide construction general permit and the small municipal separate stormwater sewer systems general permit.

3.8.4 Methods and Significance Criteria

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of hydrology and water quality impacts:

a) violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater water quality;
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 preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
c) substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
d) substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
e) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, cause flooding on- and off-site, or provide substantial additional sources of polluted runoff;

f) 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;

g) place within a 100-year flood hazard area structures which would impede or redirect flood flows;

h) 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; and/or

i) inundation by seiche, tsunami, or mudflow.

Regarding items "f" and "g," above, the Project is not located in a flood hazard area and these issues are therefore eliminate from further consideration. Regarding item "i," above, the Project site is located substantially inland from the ocean and tsunamis pose no threat to the Project site. A seiche is an oscillation of water within a closed impoundment such as a lake or reservoir caused by seismic activity. The Project site is not located in sufficiently close proximity to a water body with the size and depth that would create a potential risk associated with seiche. Nor is the Project located in an area where potential mudflow with the potential to inundate the Project would exist. Therefore, item "i" has been eliminated from further consideration.

The potential water quality impacts associated with items "a," "c," and "e" are addressed at Impact 3.8-1. Potential groundwater impacts associated with item "b" are discussed at Impact 3.8-2. Potential stormwater runoff impacts associated with items "c," "d," and "e" are discussed at Impact 3.8-3.

3.8.5 Impacts and Mitigation Measures

Impact 3.8-1: Potential to violate a water quality standard or waste discharge requirement or otherwise provide a substantial additional source of polluted runoff. (Less than Significant)

Project construction would use materials that would create the potential for release of pollutants into local stormwater discharges. Project construction would involve activities such as clearing and grading of land, trenching, cutting of slopes, and other activities associated with building roadways. Construction activities could lead to the generation of sediments and use of substances containing chemical pollutants. Pollutants commonly associated with roadway construction include oil, motor vehicle fuel, asphalt, cement and concrete, paints, solvents, and adhesives. Table 3.8-1, "Typical Road Construction Materials and Pollutants," lists the types of materials and pollutants that could be used during Project construction (the table provides a representative list of materials and does not include all potential materials). Sediment may be generated during and subsequent to grading activities (including cuts and fills, and import and export of soil to and from the construction site), and as a result of erosion of hillsides, slopes, and stormwater conveyance channels/ditches.

Table 3.8-1. Typical Road Construction Materials and Pollutants		
Category	**Product/Activity**	**Pollutants**
Adhesives	Adhesives, glues, resins, epoxy synthetics, caulks, sealers, putty, sealing agents coal tars (naphtha, pitch)	Phenolics, formaldehydes, asbestos, benzene, phenols, paphthalene
Cleaners	Polishes(metal, ceramic, tile), etching agents, cleaners, ammonia, lye, caustic sodas, bleaching agents, chromate salts	Metals, acidity/alkalinity, chromium
Painting	Paint Thinner, acetone, methyl ethyl ketone, stripper, paints, lacquers, varnish, enamels, turpentine, GUM spirit, solvents	Volatile organic compounds (VOCs), metals, phenolics, mineral spirits
Woods	Sawdust, particle board dusts, treated woods	Biochemical oxygen demand (BOD), formaldehyde, copper, creosote
Masonry and concrete	Dusts (brick, cement), colored chalks (pigments), concrete curing compounds, glazing compounds, cleaning surfaces	Acidity/alkalinity, sediments, metals, asbestos
Operations and maintenance	Vehicle and machinery maintenance, gasoline, oils, additives, marking paints (sprays), grading, earth moving, portable toilets, fire hazard control (herbicides), pest control, wash waters	Oils and grease, coolants, benzene and derivatives, oils and grease, vinyl chloride, metals, sediments, BOD1, disinfectants, pathogens, sodium, arsenic, dinitro compounds, rodenticides, insecticides, herbicides, concrete, oils, greases
Landscaping and earthmoving	Plating, plant maintenance, excavation, tiling masonry and concrete, solid wastes (trees, shrubs, green waste, mulch), exposing mineral deposits, soil additives, revegetation of graded areas	Pesticides, herbicides, nutrients, erosion (sediments), BOD1, acidity/alkalinity, metals, aluminum sulfate, sulfur, fertilizers
Roadway paving	Asphalt batching, concrete batching, vehicle and machinery maintenance, gasoline, oils, additives, marking paints (sprays), grading, earth moving	VOCs, arsenic, benzene, formaldehyde, cadmium, oils, naphthalene, kerosene, sediment, oils and grease, coolants, vinyl chloride

Following completion of Project construction and opening of the new road segment for vehicle travel, the potential for on-going pollutants from vehicles and maintenance (including landscape maintenance) would exist within the Project area. Table 3.8-2, "Typical Pollutants in Roadway Runoff," lists stormwater pollutants commonly associated with roadways and

could be reasonably anticipated to be present in stormwater runoff from within the Project site.

Table 3.8-2. Typical Pollutants in Roadway Runoff

Product/Source	Pollutants
Exhaust products	Oil and grease, volatile organic compounds (VOCs)
Brake pad dust	Metals and ceramics
Tire residues	Rubber and metals
Leaks and spills of fuels, oil antifreeze, solvents, degreasers	Oil and grease, VOCs
Litter, vegetation debris	Gross solids, sediment
Fertilizers and pesticides	Nutrients(nitrates, phosphates), VOCs

Control of stormwater and stormwater discharges during Project construction activities would be subject to a Stormwater Pollution Prevention Plan (SWPPP) and County policies and regulations, specifically the County's *Grading Ordinance and Storm Water Management Plan for Western El Dorado County*, regarding erosion and ground instability. The County's contract provisions would require compliance with BMPs for controlling stormwater runoff identified in the SWPPP. In the absence of implementing BMPs, stormwater discharges during Project construction could contain sediment and pollutants that could cause or contribute to violations of water quality standards and waste discharge requirements or could otherwise provide substantial additional sources of polluted runoff, and would be considered a potentially significant impact. Although the Project is required to implement a SWPPP, Mitigation Measure 3.8-1 is identified here to specify this requirement and provide a mechanism for the County's oversight to ensure this potentially significant impact is avoided. Implementation of Mitigation Measure 3.8-1 would reduce this impact to less than significant.

The completed Project includes stormwater and runoff control components that are consistent with the County SWMP (El Dorado County 2004). These components include landscaping within the median and along the meandering bike path on the west side of the roadway, storm drains with erosion protection at the outlets, and design features that limit stormwater runoff so as not to exceed pre-Project flows. These stormwater and runoff control components are features of the Project, incorporated as part of the County's Project design process. They are consistent with the SWRCB's statewide Construction General Permit and the Small Municipal Separate Stormwater Sewer Systems General Permit. Verification of the installation and performance of these Project components will be addressed by the County's construction compliance inspection. As a result of these County programs and procedures, the Project will have a less-than-significant impact on water quality after construction is completed.

Mitigation Measure 3.8-1: ***The County shall prepare a Construction Stormwater Pollution Prevention Plan (SWPPP) for the Project that contains specific provisions for best management practices (BMPs) for reducing and controlling erosion from areas of excavation, fill, vegetation clearing and grading during and following Project construction.***

1) *A Construction SWPPP shall be prepared and implemented for the Project. The SWPPP shall include both temporary and permanent BMPs appropriate for avoiding or minimizing erosion and stormwater contamination and runoff from areas of excavation, fill, vegetation clearing and grading required for Project construction. The SWPPP shall be prepared by a qualified SWPPP practitioner and implemented before, during and following construction as needed to construct, monitor and maintain the BMPs required for the Project.*
2) *The SWPPP shall comply with Central Valley Regional Water Quality Control Board requirements for general construction activities and Project construction plans and specifications shall include County SWMP BMPs that are designed to control stormwater runoff. Objectives of the SWPPP shall include (1) identifying pollutant sources that may affect the quality of stormwater associated with construction activity; and (2) identifying, constructing, and implementing stormwater pollution prevention measures to reduce pollutants in stormwater after construction.*
3) *During construction of the Project, stormwater runoff shall be controlled using temporary runoff control structures on fill and cut slopes and at stormwater drains.*
4) *Project design shall include the following design measures:*
    - *Drain terraces on fill slope to stable ditch and outlet.*
    - *Apply rock to protect cut-slope terraces if final slope exposes soil rather than bedrock.*
    - *Provide channel/ditch gradient control when channels are over 50 feet long.*
5) *Following construction of the Project, erosion control and stormwater runoff control measures shall be implemented for slope stabilization and runoff control that include, but are not necessarily limited to, the following measures:*
    - *Mulch and seed disturbed ground, including fill slopes, using native species to the extent possible.*
    - *Provide channel/ditch gradient control when the affected length is greater than 50 feet.*
    - *Place straw wattles or comparable erosion control material on cut and fill slopes to break up surface, install as specified by manufacturer or at a minimum of 10 feet apart on slopes greater than 2:1.*

Significance with Mitigation: Less than Significant

Impact 3.8-2. Potential to 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 preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). (Less than Significant)

The Project does not propose to use groundwater. The small pond near the north end of the Project site, however, would be permanently filled with earthen materials as part of the roadway construction. As discussed in Section 3.8.2.3, above, groundwater currently discharges to this pond. The watershed area for this pond and for the springs that discharge to the pond is larger than the Project site and substantially larger than the area that would be paved with impermeable surfacing. Therefore, the Project would not interfere substantially with groundwater recharge.

Permanently filling the pond with earthen material (i.e., eliminating the pond) could reduce the amount of groundwater that currently discharges from springs within the Project site or could redirect that discharge to other springs adjacent to the Project site. In either case, however, the Project would not increase the total amount of groundwater discharge from springs. Therefore, the Project would not result in a loss of groundwater and would not deplete groundwater supplies or affect the production rate of existing nearby wells.

As a result of the absence of potential substantial interference with groundwater recharge or depletion of groundwater, this is a less-than-significant impact.

Impact 3.8-3. Potential to substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation or flooding on- or off-site. (Less than Significant)

Existing drainage on the Project site generally flows toward the northwest. Construction of the Project would create the potential to alter/interfere with drainage patterns; however, the Project design includes drainage undercrossings that would allow general drainage patterns to be maintained through the site.

A preliminary drainage report was been prepared for the Project and is included as Appendix F of this Draft SEIR (Stantec 2008). The drainage report identifies the drainage infrastructure and design sizing that would ensure only minor changes in the existing drainage pattern would occur. The Project drainage network includes concrete-lined ditches between the roadway and upslope properties, curb and gutter along the roadway, with storm drain drop inlets. The storm drainage system for the Project would connect to the existing drainage pipe network that was installed under the recently constructed segment of Silver Springs Parkway north of the Project. The existing drainage pipe network discharges to existing natural drainage channels to the west of Silver Springs Parkway. Erosion control features would be provided at the outlets to protect both the outfall and the receiving channels. The storm drainage components have been sized to convey the runoff from a 10-

year storm event, in accordance with the County Drainage Manual (Stantec 2008). With appropriate design, existing drainage patterns would not be significantly altered and therefore erosion, siltation or flooding on- or off- site impacts would be less than significant. However, to ensure that the final Project design adequately controls stormwater runoff, Mitigation Measure 3.8-3 requires that a final drainage plan be prepared to establish specific stormwater conveyance facilities based on current site conditions, any final adjustments to the Project that could modify the specifications for stormwater conveyance facilities, and current regulatory requirements. Implementation of Mitigation Measure 3.8-3 would ensure that the impact associated with alteration of existing drainage is less than significant.

Mitigation Measure 3.8-3: ***The County shall prepare a final drainage plan to support final Project design that contains specific recommendations for stormwater conveyance facilities.***

The County shall prepare a final drainage plan that will be implemented and incorporated into the final Project design and the plan shall include design recommendations sufficient to ensure that the existing drainage pattern of the Project site will be maintained and will not result in substantial on- or off-site erosion, siltation or flooding.

Significance with Mitigation: Less than Significant

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3.9 Land Use and Planning

This section discusses potential land use impacts associated with the Project. The assessment considers potential conflicts of the Project with existing and potential future land uses within or adjacent to the Project and considers the Project's consistency with the County General Plan and other relevant land use plans.

3.9.1 Summary of the 1992 Bass Lake Road Realignment EIR Land Use Evaluation

The 1992 Bass Lake Road Realignment EIR evaluated the realignment project's consistency with the El Dorado County General Plan (as existed at that time), the Rescue Area Plan, and the County's Bikeway Master Plan and Hiking and Equestrian Trails Master Plan. The EIR also evaluated the realignment project's consistency with adjacent land uses and Williamson Act contracts. The assessment determined that the realignment project would be consistent with applicable plan policies, with the possible exception of policies associated with planning for bicycle and equestrian trails and Williamson Act contracts.

At the time the 1992 Bass Lake Road Realignment EIR was prepared, detailed design plans for the realignment project had not been developed and the analysis did not determine whether bicycle and equestrian facilities would be included consistent with Rescue Area Plan policies. The conclusion recommended that the Board of Supervisors should consider whether such facilities should be included. The Silver Springs Parkway design includes bicycle and pedestrian facilities consistent with the current (2004) County General Plan. The Rescue Area Plan is not applicable to the Project and no applicable County planning documents contain policies requiring development of equestrian facilities associated with the proposed Project.

Also at the time the 1992 Bass Lake Road Realignment EIR was prepared, certain lands within which the realignment route was proposed to be located were held under Williamson Act contracts. These lands were adjacent to Green Valley Road and not within areas where the Project segment of Silver Springs Parkway evaluated in this SEIR are located. Further, the Williamson Act contracts for those properties have subsequently been removed through nonrenewal. Thus, this previously identified potential land use conflict is not applicable to the proposed Project.

3.9.2 Environmental Setting

The Project is located in western El Dorado County generally between the unincorporated communities of El Dorado Hills and Cameron Park.

3.9.2.1 Existing Land Use Designations and Land Uses

Figure 3.9-1, "Project Area Land Uses and General Plan Designations," identifies the primary existing land uses and General Plan Land Use Designations within the Project area.

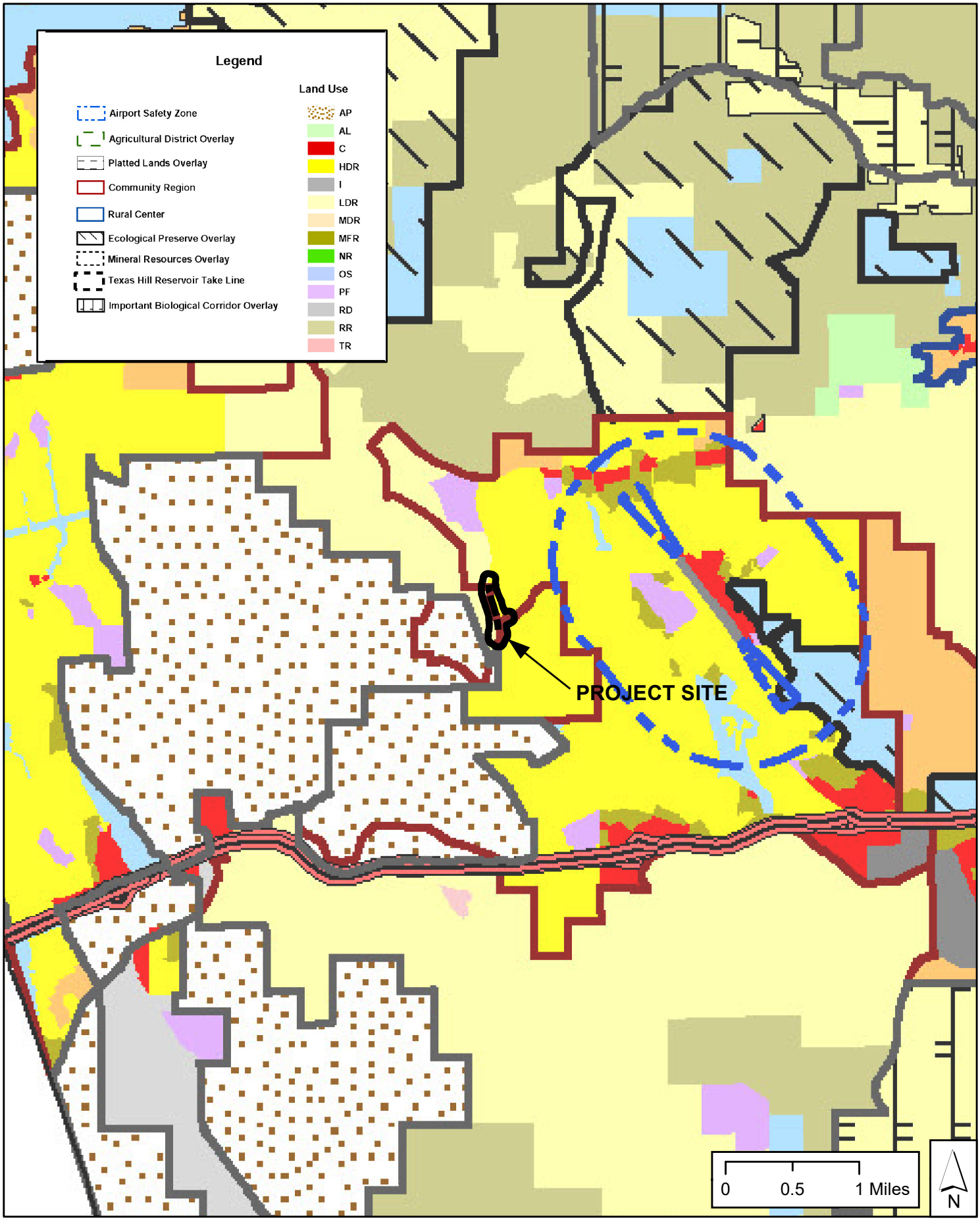
Two General Plan land use designations, *Low-Density Residential* and *High-Density Residential*, apply within the Project area, as shown on Figure 3-9-1. Definitions of these land use

designations as specified in Policy 2.2.1.2 of the El Dorado County General Plan are provided below:

> ***Low-Density Residential (LDR):*** This land use designation establishes areas for single-family residential development in a rural setting. In Rural Regions, this designation shall provide a transition from Community Regions and Rural Centers into the agricultural, timber, and more rural areas of the County and shall be applied to those areas where infrastructure such as arterial roadways, public water, and public sewer are generally not available. This land use designation is also appropriate within Community Regions and Rural Centers where higher density serving infrastructure is not yet available.
>
> The maximum allowable density shall be one dwelling unit per 5.0 acres. Parcel size shall range from 5.0 to 10.0 acres. Within Community Regions and Rural Centers, the LDR designation shall remain in effect until a specific project is proposed that applies the appropriate level of analysis and planning and yields the necessary expansion of infrastructure.
>
> ***High-Density Residential (HDR):*** This land use designation identifies those areas suitable for intensive single-family residential development at densities from one to five dwelling units per acre. Allowable residential structure types include single-family attached (i.e., air-space condominiums, townhouses) and detached dwellings and manufactured homes. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers. Standard residential subdivisions shall maintain a density range from one to two dwelling units per acre. Residential subdivisions utilizing the planned development concept shall maintain a density range from one to five dwelling units per acre. Residential development of single-family, attached dwelling units is to be designed to satisfy the upper range of the allowable density under this designation. Proponents of single-family detached or manufactured home projects consistent with the HDR designation shall not be subject to the Planned Development combining zone if their projects meet the criteria set forth in Policy 2.2.5.4. (Res. No. 298-98; 12/8/98)

Parcels within which the proposed Silver Springs Parkway alignment is located (APNs 115-030-04-100, 115-030-03-100, and 115-030-15-100) contain occupied residences on large lot parcels. The residences are generally set back from the disturbance areas associated with the Project. These parcels have a general plan land use designation of LDR. Parcels adjacent to the east and south of the existing segment of Bass Lake Road also contain residential development at higher densities than along the Silver Springs Parkway alignment. These parcels have a general plan land use designated of HDR.

The parcel along the west side of the existing Bass Lake Road (APN #116-400-02) is undeveloped and owned by El Dorado County. This parcel has a general plan land use designated of LDR. This parcel has been previously considered for the potential development of a regional park and other uses, but no decision regarding development of the property has been made and at the time of preparation of this Draft SEIR no specific proposals are under review for land use decisions associated with the parcel.



SOURCE: Benchmark Resources 2015
BASE MAP: El Dorado County 2004

Figure 3.9-1. Project Area Land Uses and General Plan Designations

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Farther west of the Project site is Bass Lake proper (a water supply reservoir owned and managed by El Dorado Irrigation District) and residential development in the area referred to as Serrano. North of the Project site, is the recently completed segment of Silver Springs Parkway, with adjacent undeveloped areas within which residential development has been approved by the County. Immediately southeast of the Project site is an existing residential subdivision.

3.9.3 Laws, Regulations and Policies

The primary land use regulations within the Project study area are County General Plan land use designations, policies and County zoning ordinances. This section provides definitions of the applicable land use designations within the Project area and discusses policies relevant to the land use assessment of the Project.

3.9.3.1 El Dorado County General Plan Policies

The primary land use planning document applicable to the Project area is the *2004 El Dorado County General Plan—A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief.* The General Plan provides for long-range direction and policy for the use of land within the County and establishes the County's goals, policies and objectives as embodied in nine functional plan elements addressing the following: Land Use; Transportation and Circulation; Housing; Public Services and Utilities; Public Health, Safety and Noise; Conservation and Open Space; Agricultural and Forestry; Parks and Recreation and Economic Development. The General Plan has been amended since its approval and the discussion and evaluation herein includes consideration of the General Plan as amended through March 2015.

3.9.3.2 General Plan Policies

To assess the consistency of the proposed Project with the County General Plan, a review of the General Plan's policies was conducted to determine those with potential applicability to the Project. Appendix G, "Silver Springs Parkway to Bass Lake Road (South Segment)—El Dorado County General Plan Policy Consistency Review," of this Draft SEIR provides a matrix, which lists the policies determined to have potential relevance to this land use assessment and provides an assessment and conclusions regarding the Project's consistency with each.

3.9.3.3 General Plan Circulation Map

The 2004 El Dorado County General Plan Circulation Map (Figure TC-1 of the General Plan) depicts the proposed circulation system to support existing, approved, and planned development in unincorporated El Dorado County through 2025. This circulation system is shown on the General Plan Circulation Map using a set of roadway width classifications, developed to guide the County's long-range transportation planning and programming.

As shown on Figure 3.9-2, "General Plan Circulation Map Excerpt," the General Plan Circulation Map identifies the Silver Springs Parkway alignment between Bass Lake Road and Green Valley Road as planned future Major 2-Lane Road.

3.9.3.4 El Dorado County Board of Supervisors Resolution No. 29-2008

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

Transportation, Traffic and Transit

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

Planning and Construction

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

3.9.4 Methods and Significance Criteria

Land use impacts were assessed by evaluating the potential for the Project to conflict with existing and future land uses based on existing uses and current land use designations and zoning. The evaluation also considers the Project's consistency with specific policies of the County General Plan and provides preliminary interpretation, although it is ultimately the Board of Supervisors authority to interpret General Plan policies and determine consistency. State law requires that the General Plan be internally consistent (i.e., the various elements and policies of the General Plan cannot be inconsistent with one another). Therefore, because the General Plan identifies Silver Springs Parkway as a planned improvement, the Project is considered consistent with the General Plan from an overall perspective. Nevertheless, review of the Project's consistency with specific General Plan policies has been conducted to document consistency with specific General Plan policies.

SOURCE: Benchmark Resources 2015
BASE MAP: El Dorado County 2004

Figure 3.9-2. General Plan Circulation Map Excerpt

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Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of land use impacts:

a) physically divide an established community;
b) conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
c) conflict with any applicable habitat conservation plan or natural community conservation plan; and/or
d) conflict with the goals of Board Resolution No. 29-2008 pertaining to transportation and planning and construction.

Regarding item "a," above, the Project would not physically divide an established community, and this issues is eliminated from further consideration. Regarding item "c," above, the biological resources evaluation presented in Section 3.4 of this Draft SEIR includes consideration of applicable plans pertain to habitats and natural communities (although General Plan policies pertaining to those issues are evaluated in the land use plan consistency evaluation discussed in this section). Items "b" and "d" above are addressed and evaluated in Section 3.9.5, below.

3.9.5 Impacts and Mitigation Measures

Impact 3.9-1: Consistency with General Plan policies. (Potentially Inconsistent/Significant)

State law requires that the General Plan be internally consistent (i.e., the various elements and policies of the General Plan cannot be inconsistent with one another). The General Plan identifies the extension of Silver Springs Parkway as a planned improvement; thus, the Project, generally, is considered consistent with the General Plan. However, for the purposes of the land use plan consistency evaluation, a review of the Project's consistency with individual General Plan policies has been conducted to document Project consistency with each General Plan policy identified as having potential applicability to the Project. Specific policies deemed potentially relevant and a discussion of applicability and the Project's consistency with each is included as a matrix in Appendix C of this EIR. The review determines that the Project would be consistent with potentially applicable policies of the General Plan, with one exception. The exception is Policy 7.4.4.4 pertaining to oak woodland canopy retention requirements, as discussed further below.

As discussed in Section 3.4 at Impact 3.4-11, a total of 9.0 acres of oak canopy was identified in the 26.4 acre study area, equating to 34 percent canopy cover. Option A of General Plan Policy 7.4.4.4 requires that at least 85 percent (7.65 acres) of the existing canopy be preserved on-site; thus, the Project would be allowed to remove up to 1.35 acres of oak canopy while maintaining consistency with Policy 7.4.4.4. However, the Project would result in the removal of approximately 5.37 acres of oak canopy and would therefore result in the removal of oak canopy in excess of the Policy 7.4.4.4 Option A oak canopy retention standard. (Regardless of General Plan consistency, the loss of 5.37 acres of oak canopy is

considered to be a significant impact from a biological resources impact perspective due to the loss of habitat as discussed at Impact 3.4-11. Mitigation Measure 3.4-11 would be implemented to reduce the biological resources impact associated with oak tree removal to less than significant.)

The Board of Supervisors is currently considering an amendment to the General Plan that would replace the existing Oak Woodland Management Plan with an Oak Resources Management Plan. As envisioned at the time of preparation of this Draft SEIR (November 2015), the amendment would retain oak impact avoidance and mitigation requirements, but would eliminate the on-site canopy retention requirements currently specified in Policy 7.4.4.4. However, unless and until Policy 7.4.4.4 is amended to eliminate or modify the existing canopy retention requirements in a manner which provides for Project consistency, the Project's removal of oak canopy would be inconsistent with Policy 7.4.4.4. For the purposes of this EIR, this inconstancy is considered to be a significant impact.

Mitigation Measure 3.9-1 requires that the County not advertise for construction bids for the Project until such time as the County determines that the Project's oak tree removal can be undertaken in a manner deemed consistent with the County General Plan. Mitigation Measure 3.9-1 does not prohibit the County from proceeding with design and right-of-way acquisition, but ensures that Project construction activities would not proceed until such time as the County Board of Supervisors determines that proceeding with Project construction would not conflict with Policy 7.4.4.4 of the General Plan. Implementation of Mitigation Measure 3.9-1 would ensure consistency with the General Plan and would avoid this impact. Note that the County must comply with CEQA when considering amendments to the General Plan, and the County is currently conducting environmental review of the proposed amendments pertaining to oak woodlands. Thus, the General Plan amendments necessary for implementation of Mitigation Measure 3.9-1 will be subject to environmental review and evaluation of the potential environmental effects of such amendments is not required for this Draft SEIR.

Mitigation Measure 3.9-1: ***The County shall not advertise for construction bids for the Project until the County Board of Supervisors determines that oak tree removal can be undertaken in a manner consistent with the General Plan.***

Prior to issuing an advertisement for bids for Project construction, the County Board of Supervisors (Board) shall determine that Project-related oak tree removal can and will be accomplished in a manner consistent with the County General Plan. General Plan consistency shall be based on the Board's interpretation of applicable General Plan policies pertaining to oak woodlands habitat and mitigation requirements as specified in the Final SEIR. The Board, at its discretion, may consider and impose additional oak tree mitigation requirements as may be necessary for the Board to determine consistency with the General Plan.

Impact 3.9-2: Potential conflicts with existing and future land uses. (Less than Significant)

As discussed in Section 2.3.3.1, the Project would require that the County acquire a total of approximately 9 acres of temporary and permanent rights-of-way from portions of properties identified on Figure 2-3, "Project Area Properties and Assessor's Parcel Numbers" as Assessor's Parcel Numbers (APN) 115-030-04-100, 115-030-03-100, and 115-030-15-100. (Also see right-of-way exhibits in Appendix B.) Approximately 1.5 acres of permanent slope and drainage easement would be needed from portions of APNs 115-030-04-100, 115-030-03-100, and 115-030-15-100. Approximately 2.5 acres of temporary construction easements would also be required (in addition to permanent rights-of-way acquisition) from APNs 115-030-04-100, 115-030-03-100, 115-030-15-100, 115-031-021 and the County and Silver Springs, LLC (assuming use of all three potential construction staging areas). Figure 2-4, "Temporary and Permanent Rights-of-Way Requirements," shows areas of permanent rights-of-way acquisition and temporary construction and slope and drainage easements necessary for the Project. Acquisition could include negotiated payment, condemnation through eminent domain, and/or dedication in fee or easement. The County would also acquire (in fee right-of-way) approximately 400 square feet of a portion of the existing El Dorado Hills Community Service District property (APN 115-031-021) located northeast of the proposed Bass Lake Road/Silver Springs Parkway intersection. The Project would convert these areas to public roadway rights-of-way with the proposed Project facilities including the proposed roadway, Class II bicycle lanes, pedestrian sidewalk, and slope and drainage easements.

As discussed at Impact 3.2-1, the County General Plan Circulation Map identifies the development of Silver Springs Parkway as a planned roadway improvement. The acquisition of the necessary rights-of-way is not anticipated to preclude the existing or reasonably anticipated future uses of the remaining portions of the properties. No permanent building or other structures are located in the acquisition portions of the properties would be removed, and the acquisitions would not reduce the parcels to sizes less than that permitted by current zoning. The three residential properties from which right-of-way would be acquired for the Silver Springs Parkway portion of the Project would remain available for the same uses that presently exist and no substantial change in, or conflict with, the ability to utilize these properties would be expected. Therefore, the Project impact associated with potential conflicts with existing and future land uses is considered less than significant.

Impact 3.9-3: Consistency with El Dorado County Board of Supervisors Resolution No. 29-2008. (Less than Significant)

Impacts associated with greenhouse gas emissions and potential effects on global climate change are discussed in Section 3.6 (see Impacts 3.3-5 and 3.3-7) of this Draft SEIR. As discussed previously, the El Dorado County Board of Supervisors adopted Resolution No. 29-2008 in March of 2008 which contains goals for the implementation of positive environmental changes to reduce global impact, improve air quality and reduce dependence on landfills, promote alternative energies, increase recycling, and encourage local governments to adopt green and sustainable practices. A review of the goals stated for both "Transportation, Traffic and Transit" and "Planning and Construction" (as previously listed) identify the following goals with potential relevance to this analysis. A conclusion regarding the Project's potential to conflict with each is also provided.

Transportation, Traffic and Transit

- Reduce carbon emissions and greenhouse gases—The Project is predicted to result in a net decrease in CO_2 (carbon dioxide) emissions associated with vehicle travel due to a decrease in predicted vehicle miles traveled in the region as a result of the Project. The small net decrease in CO_2 emissions predicted as a result of the Project is considered to be a benefit in terms of greenhouse gas emission reductions and is consistent, and contributes to this goal.
- Promote carpooling and reduce vehicle miles traveled—The Project would not promote or discourage carpooling. As discussed above, the Project would result in a net decrease in vehicle miles traveled. For the purposes of this analysis, the Project is considered to be a benefit in terms of greenhouse gas emission reductions and is consistent, and contributes to this goal.
- Promote pedestrian and bicycling commuting—The Project includes pedestrian and bicycle facilities that would provide a new connection between Green Valley Road in the north and Bass Lake Road to the south. The Project would contribute to this goal by improving pedestrian and bicycle route options and facilities.
- Expand transit opportunities—The Project would improve vehicle circulation and provide additional transit route options.
- Promote programs and designs that reduce traffic congestion—The Project would improve vehicle circulation and provide additional route options. The Project would not generate new trips and would not increase traffic congestion.

Planning and Construction

- Encourage pedestrian/cycling-incentive planning—The Project includes pedestrian and bicycle facilities that would provide a new connection between Green Valley Road to the north and Bass Lake Road to the south.

This analysis concludes that the Project would not conflict with the goals of Board Resolution No. 29-2008, and no adverse impact associated with consistency with this resolution would occur. In fact, the Project would directly contribute to the goals of Resolution No. 29-2008 by reducing vehicle miles traveled, reducing CO_2 emissions, and improving pedestrian and bicycle route options.

3.10 Noise

Bollard Acoustical Consultants, Inc. (BAC) conducted a noise impact assessment for the Project to support the preparation of this Draft SEIR. The noise assessment is documented in *Environmental Noise Assessment—Silver Springs Parkway to Bass Lake Road (South Segment)* (BAC 2015), which is included as Appendix H of this Draft SEIR. The assessment considers potential Project noise impacts associated with construction and changes in traffic noise predicted to occur once the Project is constructed. This noise section of the Draft SEIR incorporates the analyses, impacts, and mitigation recommendations of the noise assessment conducted by BAC.

3.10.1 Summary of the 1992 Bass Lake Road Realignment EIR Noise Evaluation

The 1992 Bass Lake Road Realignment EIR considered potential noise impacts associated with construction activities and traffic noise. The analysis concluded that construction activities could generate noise levels in the mid to high 80 A-weighted decibel (dBA) range and that construction noise could be audible to receivers within 500 feet. The analysis considered that construction activities would occur only during day hours, eliminating any potential effect during evening or night periods, and that construction activities would occur only for a relatively short time period. As a result of these factors, impacts associated with construction noise were determined to be less than significant. However, the EIR included the following noise mitigation measure:

> ***1992 EIR Mitigation Measure I-1: Limit all project-related construction to daytime hours (7 am to 6 pm).***
>
> To evaluate traffic noise, the Bass Lake Road Realignment EIR used traffic data representing annual average traffic volumes for existing and future (2035) conditions obtained from previous traffic studies examining the cumulative impacts of developing the Bass Lake Road corridor area. The analysis determined that the distance from the centerline of Bass Lake Road to the 65 decibel (dB) noise contour would increase from 20 feet under existing conditions (at that time) to 138 feet under future (cumulative) conditions with the project. The analysis concluded that areas with the 65 dB contour could be significantly impacted. The EIR identified a mitigation measure (I-2) specifying that the County would require all applicants for tentative subdivision maps to demonstrate how 65 dB (exterior) and 45 dB (interior) noise levels would be achieved before approvals of subdivision maps for residential developments in the area. The mitigation identified that the following mechanisms could reduce noise levels: setbacks, landscaped berms, shielding by placing structures between noise source and the receiver, site design, and building design.

3.10.2 Environmental Setting

3.10.2.1 Fundamentals of Traffic Noise

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The decibel scale uses the hearing threshold

(20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in sound levels correspond closely to human perception of relative loudness.

3.10.2.2 Existing Noise-Sensitive Receptors and Land Uses

The predominant land use within the Project vicinity is open space and residential single-family, and the existing Bass Lake Road. These residential land uses are considered noise-sensitive for the purposes of the Project's environmental impact evaluation. Figure 3.10-1, "Existing Land Uses and Noise Receptors," identifies the locations of six representative noise-sensitive residential receivers that were selected for analysis of potential noise impacts associated with the Project and identifies the locations where noise monitoring was conducted for the purposes of establishing existing (baseline) noise levels in the Project area. Descriptions of each receiver analyzed in this study are summarized in Table 3.10-1, "Representative Noise-Sensitive Receiver Descriptions."

Figure 3.10-1, shows existing land uses located within the Project vicinity and identifies the locations of representative residential sensitive receptors used for the analysis. A description of the receptors analyzed in this study is provided in Table 3.10-1.

Table 3.10-1. Representative Noise-Sensitive Receiver Descriptions

Receiver	Description
1	This residence is located on the west side of the Project segment of the proposed Silver Springs Parkway at Assessor's Parcel Number (APN) 115-030-04. This is the northernmost residential receiver along the Project study corridor and located the furthest from Bass Lake Road. Based on the distance between this residence and Bass Lake Road and the absence of obvious or known adjacent active land uses, this residential receptor is expected to have the lowest existing ambient noise conditions of any residences analyzed in this study. This residential structure is located approximately 365 feet from the future Silver Springs Parkway centerline. The primary outdoor activity area of this residence is identified through review of aerial imagery as the backyard/swimming pool area (west of the residential structure), which is located approximately 480 feet from the future roadway centerline and partially shielded from view of the proposed extension by the residential structure. Access to this property was not available for conducting ambient noise monitoring for the BAC 2015 noise study. Ambient conditions at this receptor were assumed to be generally similar to conditions at ambient noise measurement Site C.
2	This residence is located on the east side of the Project segment of the proposed Silver Springs Parkway extension, approximately midway along the extension, at APN 115-030-03. This residential structure is located approximately 310 feet from the Project roadway centerline. The primary outdoor activity area of this residence is identified through review of aerial imagery as the backyard/swimming pool area (east of the residential structure), which is located approximately 390 feet from the Project roadway centerline and shielded by the residential structure. Access to this property was not available for conducting ambient noise monitoring for this study. Ambient conditions at this receptor were assumed to be generally similar to conditions at ambient noise measurement Site B.
3	This residence is located on the west side of the Project segment of the proposed Silver Springs Parkway at APN 115-030-15. This residential receiver is northeast of the proposed intersection of Silver Springs Parkway and Bass Lake Road. This residential structure is located approximately 240 feet from the future Silver Springs Parkway centerline. No clearly defined primary outdoor activity area could be identified for this residence from review of aerial imagery. As a result, the outdoor activity area was assumed to be within a 100 foot radius of this residence, or within approximately 140 feet from the proposed Silver Springs Parkway centerline. Ambient conditions at this receptor

Table 3.10-1. Representative Noise-Sensitive Receiver Descriptions

Receiver	Description
	were assumed to be similar to conditions at ambient noise measurement Site B.
4	This residence is located on the south side of Bass Lake Road at APN 115-310-22. It is considered to be generally representative of the noise exposure of the residence to the immediate west. Neither this residence, nor the residence to the immediate west, have noise barriers along Bass Lake Road. This residential structure is located approximately 210 feet from the centerline of Bass Lake Road. The primary outdoor activity area of this residence is identified as the backyard/swimming pool area, which is located approximately 190 feet from the Bass Lake Road centerline. Ambient conditions at this receptor were assumed to be similar to conditions at ambient noise measurement Site A.
5	This residence is located on the south side of Bass Lake Road at APN 115-310-03. It is considered to be generally representative of the noise exposure at the neighboring residences to the west. This residence is partially shielded from existing Bass Lake Road traffic noise levels by an existing noise barrier. That barrier, which starts at this residence, continues westerly and southerly along the south and east sides of Bass Lake Road to the southern end of the Project study corridor (with a break at Madera Way). This residential structure is located approximately 240 feet from the proposed future (realigned) centerline of Bass Lake Road. The primary outdoor activity area of this residence is identified as the backyard/swimming pool area, which is located approximately 85 feet from the road centerline. Ambient conditions at this receptor are represented by ambient noise measurement Site A.
6	This residence is located at the southeast corner of the intersection of Bass Lake Road and Madera Way, at APN 115-310-06. This residential structure is located approximately 95 feet from the future centerline of Bass Lake Road. The primary outdoor activity area of this residence is identified as the rear and side yards, which are located a minimum of approximately 85 feet from the Bass Lake Road centerline. Ambient conditions at this receptor are represented by ambient noise measurement Site A.

Source: BAC 2015.

3.10.2.3 Existing Noise Environment

The existing noise environment at the existing residences located in the immediate Project vicinity is defined almost entirely by existing Bass Lake Road traffic noise. At the existing residences located to the north of Bass Lake Road, ambient conditions are also affected by natural sounds and may also be influenced to a small degree by other human activities such as general residential activities (e.g., lawn maintenance equipment), aircraft flight (including limited small craft flight associated with the Cameron Airport approximately 1.5 miles to the east. To quantify existing ambient noise conditions at locations representative of existing residences in the Project vicinity, a long-term ambient noise survey was conducted between June 13 and 16, 2014. The noise measurement locations are shown in Figure 3.10-1. Ambient noise level measurement results are summarized in Table 3.10-2, "Ambient Noise Measurement Results."

Table 3.10-2. Ambient Noise Measurement Results						
		Daytime		Nighttime		Day/Night
Site[1]	Date	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{dn}
A	6/13/2014	58	91[2]	50	74	60
	6/14/2014	57	89	48	80	58
	6/15/2014	56	90	48	78	58
	6/16/2014	58	94	49	80	60
	Average:	**57**	**91**	**49**	**78**	**59**
B	6/13/2014	45	73	44	66	52
	6/14/2014	45	72	43	74	51
	6/15/2014	45	72	43	64	50
	6/16/2014	47	69	44	80	54
	Average:	**46**	**72**	**44**	**71**	**52**
C	6/13/2014	41	69	40	67	47
	6/14/2014	41	73	39	59	46
	6/15/2014	41	73	37	62	46
	6/16/2014	43	81	40	79	50
	Average:	**42**	**74**	**39**	**67**	**47**

Source: BAC 2015

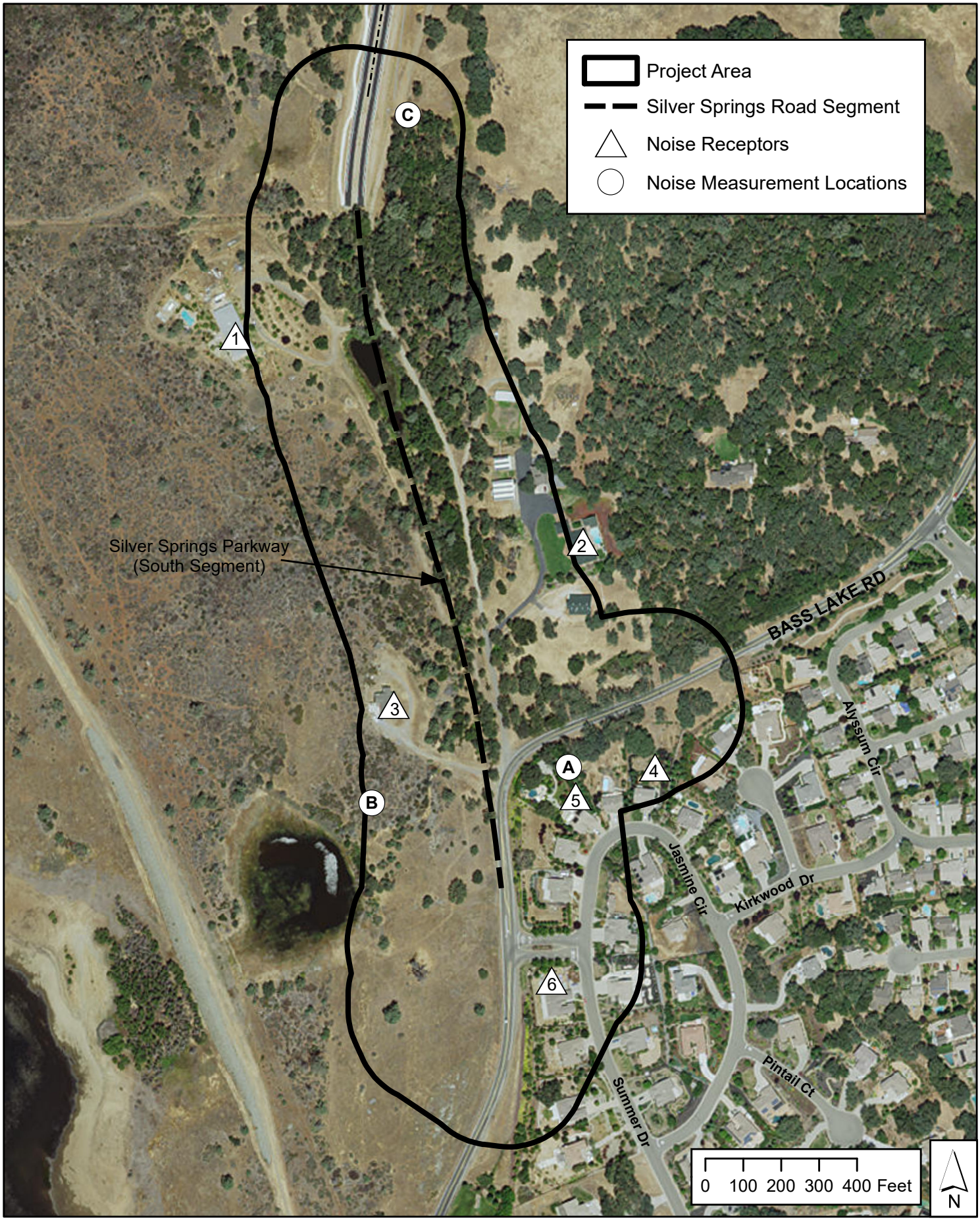
1. Noise measurement locations are shown on Figure 3.10-1.
2. Elevated maximum noise levels at Site A were believed to have been caused by periodic dog barking in close proximity to the noise meter. This was a relatively infrequent occurrence which did not appreciably affect measured average hourly noise levels or computed day-night average noise level (L_{dn}) values.

The noise survey results shown in Table 3.10-2 indicate that the lowest measured ambient conditions occurred at Site C, which was the furthest location from the Bass Lake Road. Conversely, Site A, which was in a residential backyard approximately 85 feet from the centerline of Bass Lake Road, exhibited the highest measured ambient conditions.

An existing sound barrier approximately 6 feet in height extends along the east and south sides of Bass Lake Road from Madera Way to near the eastern boundary of the residence at Assessor's Parcel Numbers (APN) 115-310-03. This residence is identified as Receiver 5 in Table 3.10-1 and also corresponds to ambient noise measurement Site C. Because the existing barrier intercepts line of sight between the existing configuration of Bass Lake Road and the adjacent residential outdoor activity areas, it is estimated to provide a 5 dB reduction in traffic noise at the majority of the shielded residences. The exception to this estimate occurs at Receptor 5, were the barrier both terminates (it does not extend to the east of the Receptor 5 property) and where Bass Lake Road is somewhat elevated relative to the base of barrier elevation. As a result, the noise reduction provided near the eastern boundary of Receptor 5 is estimated to be approximately 3 dB, rather than 5 dB.

3.10.3 Regulatory Framework

The primary regulatory requirements associated with Project-related noise are associated with noise standards of the El Dorado County General Plan. The General Plan Noise Element and applicable noise standards are discussed below.



SOURCE: Bollard 2015
BASE MAP: ESRI 2015

Figure 3.10-1. Existing Land Uses and Noise Receptors

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3.10.3.1 El Dorado County General Plan

The Public Health, Safety, and Noise Element of the El Dorado County General Plan (referenced herein as the "Noise Element") contains goals and policies defining noise standards and thresholds applicable to construction and traffic noise associated with the Project. Goal 6.5 of the Noise Element states "ensure that County residents are not subjected to noise beyond acceptable levels." Objective 6.5.1 states "protect existing noise-sensitive developments (e.g., hospitals, schools, churches, and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels."

The Noise Element contains several policies geared toward the satisfaction of the stated goal and objective of the Noise Element. These policies pertain to the development of new noise-sensitive land uses or new noise-generating land uses. Policies 6.5.1.9, 6.5.1.11 and 6.5.1.12 are the policies in the Noise Element, which specifically apply to roadway improvement projects, and they are reproduced below:

> **Policy 6.5.1.9:** Noise created by new transportation noise sources, excluding airport expansions, but including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 6-1 (of the General Plan Noise Element) at existing noise-sensitive land uses. *(Table 6-1 of the County Noise Element is reproduced below as Table 3.10-3, "Maximum Allowable Noise Exposure for Transportation Noise Sources.")*

Table 3.10-3. Maximum Allowable Noise Exposure for Transportation Noise Sources

Land Use	Outdoor Activity Areas[1] L_{dn}, dB	Interior Spaces	
		L_{dn}, dB	L_{eq}, 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	—	

Source: El Dorado County 2004: Table 6-1.

Notes: dB = decibel; L_{dn} = day-night average noise level; L_{eq} = energy-equivalent noise level.

1 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 decibel (dB) day-night average noise level (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.

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

3 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.

Policy 6.5.1.11: The standards outlined in Tables 6-3, 6-4, and 6-5 shall apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards. (*The Project is located in a Community Region and Table 6-3 of the Noise Element provides applicable noise exposure levels associated with construction activities. Table 6-3 of the County Noise Element is reproduced below as Table 3.10-4, "Maximum Allowable Noise Exposure for Non-Transportation Noise Sources in Community Regions and Adopted Plan Areas—Construction Noise."*)

Table 3.10-4. Maximum Allowable Noise Exposure for Nontransportation Noise Sources in Community Regions and Adopted Plan Areas—Construction Noise

Land Use Designation[1]	Time Period	Noise Level (dB)	
		L_{eq}	L_{max}
Higher-Density Residential (MFR, HDR, MDR)	7 a.m.–7 p.m.	55	75
	7 p.m.–10 p.m.	50	65
	10 p.m.–7 a.m.	45	60
Commercial and Public Facilities (C, R&D, PF)	7 a.m.–7 p.m.	70	90
	7 p.m.–7 a.m.	65	75
Industrial (I)	Any Time	80	90

Source: El Dorado County 2004: Table 6-3.
Notes: dB = decibel; L_{dn} = day-night average noise level; L_{eq} = energy-equivalent noise level; L_{max} = maximum noise level.
[1] Adopted Plan areas should refer to those land use designations that most closely correspond to the similar General Plan land use designations for similar development.

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} [A-weighted decibel, day-night average noise level] 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.

3.10.4 Methods and Significance Criteria

Potential construction-related noise impacts were determined by considering typical construction activities and equipment noise levels and the potential for substantial increases in noise at adjacent noise-sensitive receptors. Short-term noise sources, such as those associated with construction activities, are considered less than significant unless noise levels are predicted to substantially exceed those typically generated during construction activities. Long-term noise impacts of the Project could occur as a result of changes in traffic patterns and traffic noise. As discussed, BAC conducted an *Environmental Noise Assessment* (BAC 2015) for the Project to determine potential increases in traffic noise at sensitive receptor locations (residential properties) adjacent to the Project.

Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of noise impacts:

a) exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
b) exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
c) a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
d) a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
e) for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels; and/or
f) for a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.

Regarding items "e" and "f," the Project is located approximately 1.5 miles west of the Cameron Airport (a public-use airport, Federal Aviation Administration Identifier: O61). However, the Project would not result in exposure of people to excess noise levels associated with the airport, and these issues are not addressed further in this report.

3.10.5 Impacts and Mitigation Measures

Impact 3.10-1: Construction noise would cause short-term variations in the ambient noise environment during construction in proximity to existing residences. (Less than Significant)

During construction of the Project, construction noise would cause short-term increases in noise levels at existing residences adjacent to construction areas. The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was utilized to model predicted noise levels associated with various construction equipment noise levels at representative receiver locations. For modeling purposes, Project construction activities were divided into four separate construction phases as follows:

- Clearing
- Grading
- Drainage/Utility/Subgrade
- Paving

Table 3.10-5, "Predicted Construction Noise Levels," shows the predicted construction-related average and maximum noise levels at noise sensitive exterior locations. Activities involved in construction would typically generate maximum noise levels ranging from 64 to 85 dB L_{eq} at the nearest residences.

Table 3.10-5. Predicted Construction Noise Levels (L_{eq}, dB)

Receiver	Distance	Clearing Phase	Grading Phase	Drainage Utility/ Subgrade	Paving Phase
1	480	64	71	71	63
2	390	65	72	73	65
3	140	74	81	82	74
4	190	72	79	79	71
5	125	75	82	83	75
6	95	78	85	85	77

Notes: dB = decibel; L_{eq} = energy-equivalent noise level.
Source: BAC 2015.

Because these noise levels would be short-term and are not expected to exceed those typically associated with construction, the impact associated with noise during Project construction is considered less than significant. Though not required to reduce this less-than-significant impact, implementation of Mitigation Measure 3.10-1 would further reduce the potential for construction-related noise impacts at sensitive receptor locations.

Mitigation Measure 3.10-1: ***The County shall require that construction contractors comply with all applicable local regulations regarding noise suppression and attenuation, that construction be limited to specific hours on Monday through Saturdays with no construction on Sunday's, and that engine-driven equipment be fitted with mufflers according to manufacturers' specifications.***

The County shall require that construction contractors comply with all applicable local regulations regarding noise suppression and attenuation, that construction be limited to specific hours on Monday through Saturdays with no construction on Sunday's, and that engine-driven equipment be fitted with mufflers according to manufacturers' specifications. The following requirements shall be included in the construction specifications:

1. *Construction activities and delivery of materials or equipment to the site shall be limited to the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. to 5:00 p.m. on Saturdays. Construction shall not occur on Sundays or on any holiday recognized by El Dorado County.*
2. *Construction equipment powered by internal combustion engines shall be properly muffled and maintained.*
3. *Equipment and vehicles shall be turned off when not in use and unnecessary idling of internal combustion engines shall be prohibited.*
4. *Stationary noise-generating construction equipment, such as air compressors, shall be located as far as practicable from adjacent residences homes and shall be acoustically shielded when located within 100 feet of adjacent residences or outdoor activity areas.*
5. *To the extent feasible, quiet equipment, particularly air compressors, shall be utilized and motorized equipment shall be outfitted with proper mufflers in good working order.*
6. *Equipment storage locations shall be sited as far as practicable from nearby sensitive receptors.*
7. *The County shall designate a "noise disturbance coordinator" who shall be responsible for receiving and responding to any complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and require that reasonable measures warranted to correct the problem be implemented. The telephone number for the disturbance coordinator shall be conspicuously posted at the construction site. The noise disturbance coordinator may be the contractor or a contractor's representative. All noise complaints received and actions taken to resolve the complaints shall be reported to the County's construction contract supervisor.*

Significance with or without Mitigation: Less than Significant

Impact 3.10-2: Increases in predicted traffic noise levels at adjacent sensitive receivers. (Less than Significant)

Once opened for public use, the new Silver Springs Parkway would result in an increase in daily vehicle trips along the new Silver Springs Parkway and a reduction in daily vehicle trips along the existing segment of Bass Lake Road north of the Silver Springs Parkway/Bass Lake Road intersection. The new parkway connection would also influence travel patterns on the surround road network (see Section 3.11, "Traffic and Transportation," for detailed discussion of existing and predicted traffic volumes and assumptions of future development). To assess Project-related traffic noise level increases resulting from the Project, traffic noise levels for existing and future (2035) conditions with the Project were compared, respectively, against existing and predicted future (2035) traffic noise levels without the Project. Table 3.10-6, "Predicted Traffic Noise Levels 100-feet from Roadway Centerlines," lists predicted noise levels under existing conditions with and without the Project at a distance of 100 feet from the centerline of study area roadways under the evaluation scenarios, and also lists the

change in noise levels by comparison of conditions without the Project to conditions with the Project.

Table 3.10-6. Predicted Traffic Noise Levels 100-feet from Roadway Centerlines (L_{dn}, dB)

Segment	Existing Conditions			Future (2035) Conditions		
	Without Project	*With Project*	*Change*	*Without Project*	*With Project*	*Change*
1. Green Valley Road—County Line to Sophia Pkwy	67	67	0.0	67	67	0.0
2. Green Valley Road—Sophia Pkwy to Francisco Dr	68	68	0.0	68	68	0.0
3. Green Valley Road—Francisco Dr to El Dorado Hills Blvd	65	65	0.0	66	66	0.0
4. Green Valley Road—El Dorado Hills Blvd to Silva Valley Pkwy	65	65	0.0	67	67	0.0
5. Green Valley Road—Silva Valley Parkway to Malcolm Dixon Rd	66	66	0.0	68	68	0.1
6. Green Valley Road—Malcolm Dixon Rd to Deer Valley Rd	65	65	-0.1	67	67	0.2
7. Green Valley Road—Deer Valley Rd to Silver Springs Pkwy	65	65	0.3	67	67	0.3
8. Green Valley Road—Silver Springs Pkwy to Bass Lake Rd	65	65	-0.3	67	66	-0.4
9. Green Valley Road—Bass Lake Rd to Cameron Park Rd	64	64	0.0	66	66	-0.1
10. Bass Lake Road—Green Valley Rd to Silver Springs Pkwy	60	59	-0.7	61	61	-0.7
11. Bass Lake Road—Silver Springs Pkwy to Serrano Pkwy	61	61	0.0	63	63	0.2
12. Bass Lake Road—Serrano Pkwy to U.S. 50	62	62	0.1	63	63	0.2
13. Silver Springs Parkway—South of Green Valley Rd	47-52	52	0-5	48-53	56	3-8
14. Silver Springs Parkway—Extension to Bass Lake Rd (Project Segment)	47-52	52	0-5	48-53	56	3-8

Notes: dB = decibel; L_{dn} = day-night average noise level.
Source: BAC 2015

Table 3.10-6 provides a range of baseline noise levels along Silver Springs Parkway (see Segments 13 and 14) because the Project segment of the roadway does not currently exist and the existing segment is not open to public travel, so modelling of existing traffic noise conditions could not be conducted for these segments. Instead, the range of noise levels shown correspond to ambient noise levels measured at noise measurement locations B and C. To predict the actual changes in traffic noise levels that would occur at the outdoor activity areas of the three nearest residences to the proposed extension of Silver Springs Parkway, as well as at existing residences located adjacent to Bass Lake Road within the Project construction limits, additional modelling of traffic noise levels at the outdoor activity areas identified for those residences was conducted. The predicted traffic noise exposure was compared against the ambient noise levels reported in Table 3.10-6 for Receptors 1 through 3, and against modelled baseline noise levels without the Project for Receptors 4 through 6. The results of this more focused analysis are provided in Table 3.10-7, "Predicted Noise Levels at Receiver Outdoor Activity Areas."

Table 3.10-7. Predicted Noise Levels at Receiver Outdoor Activity Areas (L_{dn}, dB)

Receiver	Existing Conditions			Future (2035) Conditions		
	Without Project	***With Project***	***Change***	***Without Project***	***With Project***	***Change***
1	47	48	1.2	48	50	2.1
2	52	53	0.6	53	54	1.0
3	52	54	2.2	53	56	3.5
4	55	53	-2.0	57	55	-2.1
5	58	56	-1.7	59	58	-1.7
6	57	56	-1.3	59	58	-1.1

Notes: dB = decibel; L_{dn} = day-night average noise level.
Source: BAC 2015.

As noted in Table 3.10-7, traffic noise levels are predicted to decrease at residences adjacent to Bass Lake Road both south and east of the Silver Springs Parkway intersection (Receivers 4 through 6) as a result of the Project. This decrease at residences east of this intersection (represented by Receptors 4 and 5) would result from both decreased traffic volumes and decreased vehicle speeds and associated tire noise resulting from the installation of an all-way, stop-sign-controlled intersection at the Bass Lake Road and Silver Springs Parkway intersection. The decrease at residences south of the intersection (represented by Receptor 6) would occur as a result of decreased vehicle speeds and associated tire noise resulting from installation of the all-way stop-sign-controlled intersection.

As discussed above, an existing sound barrier approximately 6 feet high extends along Bass Lake Road from Madera Way to the eastern boundary of the residence at APN 115-310-03. This residence is identified as Receiver 5 in Table 3.10-1 and corresponds to noise measurement Site C. Because the existing barrier intercepts the line of sight between the existing configuration of Bass Lake Road and the adjacent residential outdoor activity areas, it is estimated to provide a 5 dB reduction in traffic noise at the majority of the shielded residences. The exception to this estimate occurs at Receiver 5, where the barrier both

terminates (it does not extend to the east of the Receiver 5 property) and where Bass Lake Road is elevated relative to the base of barrier elevation. As a result, the noise reduction provided near the eastern boundary of Receiver 5 is estimated to be approximately 3 dB, rather than 5 dB.

The improvements to Bass Lake Road resulting from the Project would increase the elevation of Bass Lake Road adjacent to Receiver 5 by up to approximately 3 feet and would increase the elevation of Bass Lake Road adjacent to the residential property east of Receiver 5, where no noise barrier is present, by approximately 2 to 3 feet. The elevation change would moderately decrease the noise barrier effectiveness at Receiver 5. However, the slightly decreased performance of the existing noise barrier located at Receiver 5 resulting from the increased elevation of Bass Lake Road would be offset by the reduced traffic volumes and vehicle speeds passing that residence.

Comparison of Predicted Noise Levels to County Standards

According to Policy 6.5.1.9 of the County's General Plan Noise Element, noise created by roadway improvement projects shall be mitigated so as not to exceed 60 to 65 dB L_{dn} at existing noise-sensitive receptors. For this component of the analysis, Project impacts are considered to only have the potential to occur at receptor locations along segments of new roadway or segments of roadway that would be modified as a result of the Project. This policy, therefore, is interpreted to specifically pertain to Receivers 1 through 6 and immediately adjacent residents represented by the receivers. As shown in Table 3.10-7, predicted traffic noise levels at these receiver locations ranges from 48 to 58 L_{dn} dB, and is not predicted to exceed County's acceptable range of 60 to 65 dB L_{dn} at existing residences located adjacent to the Project construction limits.

Changes in Traffic Noise under Existing Conditions

The noise data presented in Table 3.10-6 indicate that the Project would result in changes in traffic noise levels relative to existing conditions ranging from -0.7 to 5 dB along study area roadway segments. Table 3.10-7 shows that the Project would result in predicted traffic noise level increases at the three residences located along the Project segment of Silver Springs Parkway ranging from 0.6 to 2.2 dB L_{dn} at the outdoor activity areas of those residences.

According to Policy 6.5.1.12 of the County General Plan Noise Element, a significant increase in traffic noise levels is defined as 1.5 to 5 dB, depending on noise levels without the Project. With the exception of residential receivers 1 through 3 which are adjacent to the Project segment of Silver Springs Parkway, the projected change in traffic noise levels along study area segments would not exceed 1.5 dB. Existing ambient noise levels at Receivers 1 through 3 are below 60 dB L_{dn}, therefore, the appropriate threshold for determining the significance of noise impacts at those locations is 5 dB. As indicated in Table 3.10-7, the traffic noise level increases at the outdoor activity areas of those receivers is predicted to range from 0.6 to 2.2 dB L_{dn}, and would not exceed the applicable significance threshold.

Also as noted in Table 3.10-7, noise levels at residences along the Project segment of Bass Lake Road (represented by Receptors 4 through 6) are predicted to decrease due to a combination of reduced vehicle trips (east of the Silver Springs Parkway/Bass Lake Road intersection) and reduced vehicle speeds (south and east of the Silver Springs Parkway/Bass Lake Road intersection) and would not exceed the applicable significance threshold.

Changes in Traffic Noise under Future (2035) Conditions

Under future (2035) conditions both with and without the Project, development in the region will add traffic to the existing roadway network resulting in a higher overall traffic noise environment. The noise data presented in Table 3.10-6 indicate that the Project would result in changes in traffic noise levels relative to existing conditions ranging from 61 to 68 dB L_{dn} at a distance of 100 feet from the centerline of study area roadways, resulting in changes in traffic noise levels relative to future (2035) conditions ranging from -0.7 to 8 dB. Predicted traffic noise level increases at the three residences located along the Project segment of Silver Springs Parkway, shown in Table 3.10-7, range from 1.0 to 3.5 dB L_{dn} at the outdoor activity areas of those residences.

According to Policy 6.5.1.12 of the County Noise Element, a significant increase in traffic noise levels is defined as 1.5 to 5 dB at a sensitive noise receptor, depending on noise levels without the Project. With the exception of residential receivers 1 through 3 which are adjacent to the Project segment of Silver Springs Parkway, the projected increases in traffic noise levels along study area segments would not exceed 1.5 dB and would not create the potential for a significant impact under future (2035) conditions with the Project. Existing ambient noise levels at Receivers 1 through 3 are below 60 dB L_{dn}, therefore, the appropriate threshold for determining the significance of noise impacts at those locations is 5 dB. As indicated in Table 3.10-7, traffic noise level increases at the outdoor activity areas of those residences resulting from the Project under future (2035) conditions is predicted to range from 1.0 to 3.5 dB L_{dn} and would not exceed the significance threshold.

Traffic Noise Impact Summary and Conclusion

As discussed in the preceding sections, the Project would not result in traffic noise levels that would exceed the County noise standard for roadway improvement projects and the Project would not result in traffic noise increases that would exceed the County's threshold of significance under existing or future (2035) conditions. As a result of these factors, the Project impact related to changes in traffic noise levels is less than significant and no mitigation is required.

Impact 3.10-3: Potential for excessive groundborne vibration from vehicle travel on Silver Springs Parkway. (Less than Significant)

Vehicle travel on roadways can generate groundborne vibration that can cause a source of annoyance and create the potential for damage to physical structures and facilities. The Project would introduce vehicle travel along the new segment of Silver Springs Parkway. As a means of determining the potential for vibration impacts associated with the Project, vibration measurement data collected for other roadway improvement projects in the region

in recent years was reviewed. Those data indicate that peak particle velocity of less than five thousandths (0.005) of an inch per second were measured on sidewalks adjacent to the major roadways for which improvements were proposed. Based on research conducted by the California Department of Transportation, peak particle velocities of less than 0.005 inches per second are well below the thresholds of human perception and do not pose a threat to either humans or structures (BAC 2015). As a result, this impact is considered less than significant and no mitigation is required.

3.11 Traffic and Transportation

Fehr and Peers transportation consultants prepared a Transportation Impact Analysis for the Project to support the preparation of this SEIR. The results of the assessment are documented in the November 2014 *Silver Springs Parkway to Bass Lake Road (South Segment) Transportation Impact Analysis* (Fehr and Peers 2015) which is included in Appendix I of this Draft SEIR. The analysis was performed consistent with the County's 2008 *Traffic Impact Study Protocols and Procedures* (El Dorado County 2008), and the assumptions and other factors of the analysis were developed in collaboration with County staff.

3.11.1 Summary of the 1992 Bass Lake Road Realignment EIR Traffic and Circulation Evaluation

The 1992 Bass Lake Road Realignment EIR did not specifically address impacts associated with transportation and circulation.

3.11.2 Environmental Setting

This section describes the existing traffic operations within the Project traffic analysis study area and also discusses other roadway improvement projects within the vicinity of the proposed Project that have relevance to the traffic analysis and future (2035) traffic conditions within the study area.

3.11.3 Traffic Operations Analysis Procedures

Each study roadway facility was analyzed using the concept of level of service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents long delays and a facility that is operating at or near its functional capacity.

3.11.3.1 Intersections

Traffic operations at the study intersections were analyzed using procedures and methodologies contained in the Highway Capacity Manual (HCM) and the Transportation Research Board, 2000 and 2010 (as confirmed with County staff). These methodologies were applied using the Synchro software packages (Version 8), developed by Trafficware. Table 3.11-1, "Intersection Level of Service Criteria," displays the delay range associated with each LOS category for signalized and unsignalized intersections based on the HCM.

The HCM methodology determines the LOS at signalized intersections by comparing the average control delay (i.e., delay resulting from initial deceleration, queue move-up time, time actually stopped, and final acceleration) per vehicle at the intersection to the established thresholds. The LOS for traffic signal controlled and all-way stop-controlled intersections is based on the average control delay for the entire intersection. For side-street stop-controlled intersections, the LOS is evaluated separately for each individual movement with delay reported for the critical (i.e., worst case) turning movement.

The following procedures and assumptions were applied for the analysis of existing and cumulative conditions:

1. Roadway geometric data were gathered using field observations.
2. Peak hour traffic volumes were entered according to the peak hour of each intersection.
3. The peak hour factor (PHF) was calculated based on traffic counts and applied by approach.
4. The counted pedestrian and bicycle volumes will be used with a minimum of two pedestrians per approach per peak hour.
5. Heavy vehicle percentages were based on traffic counts and applied by movement.
6. Signal phasing and timings were based on existing signal timing sheets provided by El Dorado County.
7. Speeds for the model network were based on the posted speed limit.
8. The PHF calculated for existing conditions was used for cumulative conditions.
9. The existing heavy vehicle percentages were maintained for cumulative conditions.
10. The existing pedestrian and bicycle volumes were maintained for cumulative conditions.
11. The 2013 Capital Improvement Program (CIP) projects were assumed to be in place for cumulative conditions.
12. Traffic signals timings were optimized to serve future traffic volumes for cumulative conditions.

Table 3.11-1. Intersection Level of Service Criteria

Level of Service	Average Control Delay (seconds/vehicle)		Description
	Signalized	***Stop Controlled***	
A	<10.0	<10.0	Very low delay. At signalized intersections, most vehicles do not stop.
B	10.1 to 20.0	10.1 to 15.0	Generally good progression of vehicles. Slight delays.
C	>20.1 to 35.0	>15.1 to 25.0	Fair progression. At signalized intersections, increased number of stopped vehicles.
D	>35.1 to 55.0	>25.1 to 35.0	Noticeable congestion. At signalized intersections, large portion of vehicles stopped.
E	>55.1 to 80.0	>35.1 to 50.0	Poor progression. High delays and frequent cycle failure.
F	>80.0	>50.0	Oversaturation. Forced flow. Extensive queuing.

Source: Transportation Research Board 2010

3.11.3.2 Roadway Segments

Roadway segment LOS was determined by comparing traffic volumes for selected roadway segments to the peak hour LOS capacity thresholds shown in Table 3.11-2, "Peak Hour Roadway

Segment Capacities by Functional Classification and LOS." These thresholds were developed by El Dorado County Community Development Agency, Long Range Planning, using HCM 2010 methodologies.

Table 3.11-2. Peak Hour Roadway Segment Capacities by Functional Classification and LOS

Functional Classification	Lanes	Roadway Segment Capacity (Vehicles per Hour)				
		LOS A	*LOS B*	*LOS C*	*LOS D*	*LOS E*
Arterial (Divide)	4	Not Achievable		1,850	3,220	3,290
Arterial (Undivided)	2			850	1,540	1,650
	4			1,760	3,070	3,130

Source: El Dorado County Community Development Agency
Notes: LOS = level of service.
Peak hour roadway segment capacities based on the HCM 2010 and developed by El Dorado County Community Development Agency, Long Range Planning.

3.11.3.3 Study Area Roadways and Existing Levels of Service

Based on coordination with the El Dorado County Community Development Agency (Long Range Planning) staff and the California Department of Transportation, the expected distribution of Project trips, and review of the El Dorado County Department of Transportation's 2008 Traffic Impact Study Protocols and Procedures, the following study intersections and roadways selected for analysis during both the a.m. and p.m. peak hours. Figure 3.11-1, "Traffic Analysis Study Area," shows the study area, roadway segments, and intersections evaluated for this Draft SEIR. Most of the study intersections are located in the Community Region, except for the Green Valley Road/Deer Valley Road intersection, which is in the Rural Region. The segment of Green Valley Road between Silva Valley Parkway and Malcolm Dixon Road spans both the Community Region and the Rural Region and the segment between Malcolm Dixon Road and Deer Valley Road is located in the Rural Region. Please note that the Project would replace the existing Bass Lake Road/Sandhurst Hill Road intersection. The Bass Lake Road/Sandhurst Hill Road intersection is not analyzed under existing conditions due to low turning movement volume using the intersection.

Intersections

1. Green Valley Road/Francisco Drive
2. Green Valley Road/El Dorado Hills Boulevard
3. Green Valley Road/Silva Valley Parkway
4. Green Valley Road/Deer Valley Road (Rural Region)
5. Green Valley Road/Pleasant Grove Middle School (signalized access)
6. Green Valley Road/Silver Springs Parkway
7. Green Valley Road/Bass Lake Road
8. Green Valley Road/Cambridge Road
9. Bass Lake Road/Serrano Parkway

10. Bass Lake Road/Silver Springs Parkway

Roadway Segments

1. Green Valley Road—County Line to Sophia Parkway
2. Green Valley Road—Sophia Parkway to Francisco Drive
3. Green Valley Road—Francisco Drive to El Dorado Hills Boulevard
4. Green Valley Road—El Dorado Hills Boulevard to Silva Valley Parkway
5. Green Valley Road—Silva Valley Parkway to Malcolm Dixon Road (Spans Community Region and Rural Region)
6. Green Valley Road—Malcolm Dixon Road to Deer Valley Road (Located in Rural Region)
7. Green Valley Road—Deer Valley Road to Bass Lake Road
8. Green Valley Road—Bass Lake Road to Cameron Park Road
9. Bass Lake Road—Green Valley Road to Silver Springs Parkway
10. Bass Lake Road—Silver Springs Parkway to Serrano Parkway
11. Bass Lake Road—Serrano Parkway to U.S. 50
12. Silver Springs Parkway—Green Valley Road to Bass Lake Road

3.11.3.4 Roadway Network

The characteristics of the roadway system near the Project are described below. Where applicable, the roadway designation given in the County General Plan (El Dorado County 2004) is provided.

Green Valley Road is an east-west roadway that connects Placerville with western portions of El Dorado County and eastern Sacramento County, south of Folsom Lake. Through the Project area, Green Valley Road provides one travel lane in each direction to just west of El Dorado Hills Boulevard. West of Francisco Drive, Green Valley is a four lane facility. The General Plan identifies Green Valley Road as a four lane divided road between the El Dorado County/Sacramento County line and Deer Valley Road. Green Valley Road serves about 27,000 vehicles per day west of Francisco Drive.

Bass Lake Road is a two-lane roadway that generally follows at north-south alignment from north of U.S. Highway 50 (U.S. 50) to Green Valley Road. The County's General Plan identifies Bass Lake Road as a four lane divided road near U.S. 50 transitioning to a four lane undivided road and eventually a two-lane road as it continues north. Bass Lake Road serves about 10,000 vehicles per day north of U.S. 50.

Cambridge Road is a two-lane roadway that generally follows a north-south alignment from north of U.S. 50 to Green Valley Road. The County's General Plan identifies Cambridge Road as a major two lane road. Cambridge Road serves about 8,000 vehicles per day north of Country Club Drive.

SOURCE: Fehr and Peers 2015

Figure 3.11-1. Traffic Analysis Study Area

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El Dorado Hills Boulevard is a north-south roadway that continues as Salmon Falls Road on the north and Latrobe Road on the south. The roadway is four lanes with a center median between Park Drive and Governor Drive. Between U.S. 50 and Park Drive, the roadway section widens to three lanes northbound to accommodate vehicle demand near the U.S. 50 interchange. The County's General Plan identifies El Dorado Hills Boulevard as a four lane divided road except near U.S. 50 where the designation changes to a six lane divided road. El Dorado Hills Boulevard serves about 22,000 vehicles per day north of Wilson Boulevard.

Silva Valley Parkway is a north-south roadway that generally runs parallel to El Dorado Hills Boulevard north of U.S. 50. Silva Valley Parkway ranges from two lanes to four lanes with a center median within the study area. The General Plan identifies Silva Valley Parkway as a four lane divided road. A new U.S. 50 interchange at Silva Valley/White Rock Road is currently under construction and is included in the Cumulative conditions transportation analysis. The interchange project provides a realigned Silva Valley Parkway that will connect to the existing four-lane Silva Valley Parkway to the north and the existing two-lane White Rock Road on the south. A new signalized intersection will be installed where the new Silva Valley Parkway will intersect old White Rock Road on the south. Silva Valley Parkway serves about 9,300 vehicles per day north of U.S. 50.

U.S. 50 is an east-west freeway located south of the project site. Generally, U.S. 50 serves the majority of El Dorado County's major population centers and provides regional connections to the west (i.e., Sacramento) and to the east (i.e., State of Nevada). Primary access to the project from U.S. 50 is provided via the U.S. 50/El Dorado Hills Boulevard/Latrobe Road interchange. Near the Bass Lake Road interchange, westbound U.S. 50 has a high-occupancy vehicle (HOV) lane and two general purpose travel lanes and eastbound U.S. 50 has an HOV lane and three general purpose travel lanes. The General Plan identifies U.S. 50 as an eight-lane freeway under future conditions. U.S. 50 serves about 80,000 vehicles per day east of Latrobe/El Dorado Hills Boulevard.

The **U.S. 50/El Dorado Hills Boulevard/Latrobe Road interchange** is currently under construction to improve the westbound on- and off-ramps, add 1,000 feet of auxiliary lane to westbound U.S. 50, and provide westbound ramp metering and a dedicated HOV on-ramp lane. Additional future improvements are also planned for this interchange.

Construction of the new **U.S. 50/Silva Valley Parkway/White Rock Road** interchange began in 2014. The interchange will be constructed in two phases. Phase 1 (CIP Project No: 71328) will construct a new connection to U.S. 50 with new signalized slip on- and off-ramps westbound and a slip off-ramp and loop on-ramp eastbound. The mainline will have an overcrossing for Silva Valley Parkway and will be improved to include eastbound and westbound auxiliary lanes between the U.S. 50/El Dorado Hills Boulevard/Latrobe Road interchange and the new U.S. 50/Silva Valley interchange. Completion of Phase 1 is scheduled for 2016. Phase 2 will construct a westbound loop on-ramp and eastbound slip on-ramp (CIP Project No: 71345). The westbound loop on-ramp will begin the addition of an auxiliary lane that will continue westbound through the El Dorado Hills Boulevard interchange and terminate at the planned U.S. 50/Empire Ranch interchange (CIP Project No: 53120).

The planned reconstruction of the **U.S. 50/Bass Lake Road interchange** (CIP Project No: 71330 and GP148) will add a westbound auxiliary lane between the Bass Lake Road and Silva Valley Parkway interchanges.

3.11.3.5 Existing Conditions Peak Hour Traffic Volumes

Intersection and roadway segment counts were collected to determine the existing traffic operations of study facilities. Weather conditions were generally dry and local schools were in full session, during the traffic count data collection. Intersection turning movement counts and daily roadway segment counts during the a.m. peak period (7 a.m. to 9 a.m.) and p.m. peak period (4 p.m. to 6 p.m.) were collected in May 2014. Construction was ongoing at the U.S. 50/El Dorado Hills Boulevard interchange. Each intersection's peak hour within the peak period was used for the analysis. On the west end of the corridor, the counts indicate that the a.m. peak hour is between 7:00 and 8:00 and the p.m. peak hour is between 5:00 and 6:00. On the east end of the corridor, the counts indicate that the a.m. peak hour is between 7:15 and 8:15 and the p.m. peak hour is between 5:15 and 6:15. Figure 3.11-2, "Peak Hour Traffic Volumes, Lane Configurations and Traffic Controls" provides peak hour traffic volumes, lane configurations and traffic controls at each of the study intersections.

3.11.3.6 Existing Conditions Peak Hour Vehicle Level of Service

3.11.3.6.1 Intersections

Table 3.11-3, "Peak Hour Intersection Level of Service—Existing Conditions," summarizes existing conditions a.m. and p.m. peak hour Level of Service (LOS) for the study intersections. The LOS of a facility is a qualitative measure used to describe operating conditions. LOS ranges from A (best), which represents short delays, to LOS F (worst), which represents long delays and a facility that is operating at or near its functional capacity.

As shown in Table 3.11-3, all of the study intersection operate at LOS E or better during both the a.m. and p.m. peak hours. The Bass Lake Road/Sandhurst Hill Road intersection was not analyzed under existing conditions due to low turning movement volume to and from Sandhurst Hill Road. AM peak hour traffic operations at the Green Valley Road/Pleasant Grove Middle School intersection (Intersection 5) reflect recent improvements in onsite traffic management implemented by the school. Prior to the improvements, the intersection operated at LOS E during the AM peak hour due to vehicle queue spillback from the westbound left-turn movement that would block westbound through traffic.

Table 3.11-3. Peak Hour Intersection Level of Service—Existing Conditions

Intersection	Traffic Control	LOS/Delay (seconds)	
		AM	*PM*
1. Green Valley Road/Francisco Drive	Signal	D/41	D/40
2. Green Valley Road/El Dorado Hills Boulevard	Signal	E/64	E/58
3. Green Valley Road/Silva Valley Parkway	Signal	C/22	B/18
4. Green Valley Road/Deer Valley Road	SSSC	C/19	D/27

Table 3.11-3. Peak Hour Intersection Level of Service—Existing Conditions			
Intersection	**Traffic Control**	**LOS/Delay (seconds)**	
		AM	***PM***
5. Green Valley Road/Pleasant Grove Middle School	Signal	B/11	B/13
6. Green Valley Road/Silver Springs Parkway	Signal	A/5	A/4
7. Green Valley Road/Bass Lake Road	Signal	D/42	B/17
8. Green Valley Road/Cambridge Road	Signal	C/21	B/15
9. Bass Lake Road/Serrano Parkway	Signal	B/13	A/9
10. Bass Lake Road/Sandhurst Hill Road (Silver Springs Parkway)	N/A	N/A	N/A

Source: Fehr & Peers, 2014
Notes: SSSC = side-street stop control; AWSC = all-way stop control, N/A = Not Applicable
The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For SSSC intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM (Transportation Research Board 2000).

3.11.3.6.2 Roadway Segments

Table 3.11-4, "Roadway Segment Peak Hour Level of Service—Existing Conditions," summarizes existing conditions a.m. and p.m. peak hour LOS for the study roadways. Most study area roadway segments operate at acceptable levels (better than LOS F), with most operating at LOS C or better. The two-lane segment of Green Valley Road from the County line to just west of Sophia Parkway operates unacceptably at LOS F.

Table 3.11-4. Roadway Segment Peak Hour Level of Service—Existing Conditions							
Roadway Segment	**Facility**	**AM**			**PM**		
		VOL	***VC***	***LOS***	***VOL***	***VC***	***LOS***
GREEN VALLEY ROAD							
County Line to West of Sophia Parkway	2A	1,467	0.89	D	1,797	**1.09**	**F**
East of Sophia Parkway to Francisco Drive	4AD	1,546	0.47	C or better	2,114	0.64	D
East of Francisco Drive to El Dorado Hills Boulevard	2A	1,015	0.62	D	1,121	0.68	D
El Dorado Hills Boulevard to Silva Valley Parkway	2A	863	0.52	D	1,088	0.66	D
Silva Valley Parkway to Malcolm Dixon Road	2A	707	0.43	C or better	987	0.60	D
Malcolm Dixon Road to Deer Valley Road	2A	688	0.42	C or better	872	0.53	D
Deer Valley Road to Silver Springs Parkway	2A	762	0.46	C or better	862	0.52	D
Silver Springs Parkway to Bass Lake Road	2A	762	0.46	C or better	862	0.52	D

Table 3.11-4. Roadway Segment Peak Hour Level of Service—Existing Conditions							
Roadway Segment	**Facility**	**AM**			**PM**		
		VOL	***VC***	***LOS***	***VOL***	***VC***	***LOS***
Bass Lake Road to Cameron Park Road	2A	774	0.47	C or better	965	0.58	D
BASS LAKE ROAD							
Green Valley Road to Silver Springs Parkway	2A	582	0.35	C or better	538	0.33	C or better
Silver Springs Parkway to Serrano Parkway	2A	726	0.44	C or better	772	0.47	C or better
Serrano Parkway to U.S. 50	2A	935	0.57	D	859	0.52	D
SILVER SPRINGS PARKWAY							
South of Green Valley	2A	-	-	-	-	-	-
Extension to Bass Lake Road	2A	-	-	-	-	-	-

Source: Fehr & Peers, 2014

Notes: Peak hour roadway segment capacities based on the HCM 2010 and developed by El Dorado County Community Development Agency, Long Range Planning.

4AU = 4-Lane Undivided Arterial, 4AD = 4-Lane Divided Arterial, 2A = 2-Lane Arterial

Bold and underlined text indicates LOS worse than the established acceptable condition.

3.11.3.7 Pedestrian Circulation

Pedestrian facilities are limited near the Project site. Sidewalks are located on the south side of Green Valley Road from west of the Pleasant Grove School signalized intersection to Bass Lake Road. The existing segment of Silver Springs Parkway (south of Green Valley Road) includes sidewalks on the west side of the roadway for its entire length and on the east side between Green Valley Road and the first intersection. In addition, the Green Valley Road/Bass Lake Road intersection includes intersection controlled pedestrian crosswalks on the north, south and east legs. These pedestrian facilities connect Pleasant Grove Middle School and Green Valley Elementary School to study area residential development. There are no existing sidewalks on Bass Lake Road near the proposed Project location.

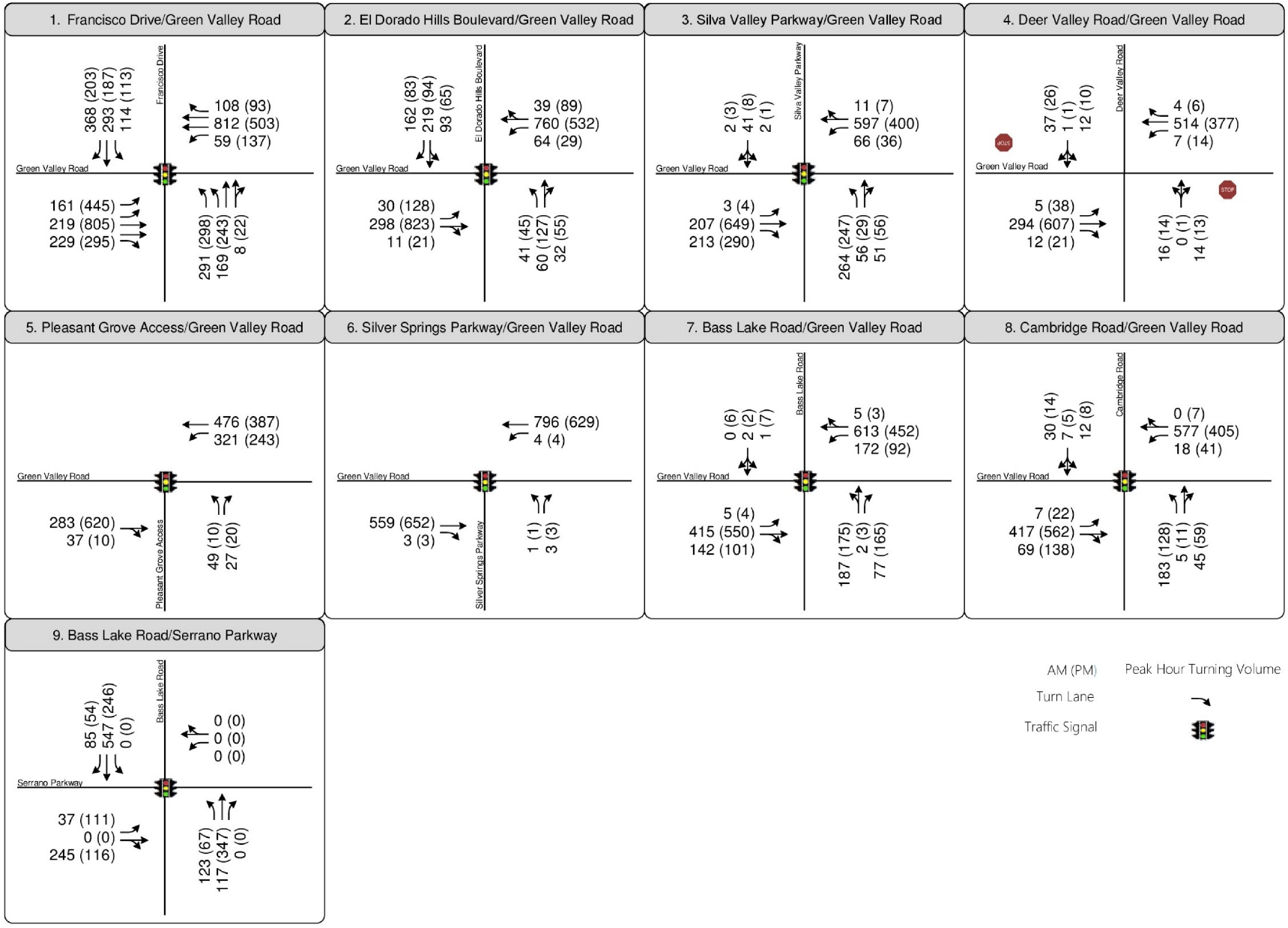
3.11.3.8 Bicycle Circulation

Bicycle facilities are classified into three categories:

Class I Bicycle Path—Off-street bike paths within exclusive right-of-way; usually shared with pedestrians

Class II Bicycle Lane—Striped on-road bike lanes adjacent to the outside travel lane on preferred corridors for biking

Class III Bicycle Route—Shared on-road facility, usually delineated by signage and pavement markings



SOURCE: Fehr and Peers 2015

Figure 3.11-2. Peak Hour Traffic Volumes, Lane Configurations, and Traffic Controls

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In the study area, according to the El Dorado Bicycle Transportation Plan, 2010 Update (El Dorado County Transportation Commission) and field observations, the following major bikeway facilities are present within the study area:

- Class II bicycle lanes on Green Valley Road from west of Pleasant Grove Middle School to Cameron Park Drive and on Serrano Parkway.
- Class I bicycle path on the east and west sides of Bass Lake Road between Serrano Parkway and Hollow Oak Drive
- Class II bicycle lanes are planned (where they do not currently exist) for Green Valley Road, Bass Lake Road, and Cambridge Road.

3.11.3.9 Transit

El Dorado County Transit Authority (El Dorado Transit) provides public transit service within the Project area. Cameron Park is served by an El Dorado Transit Local Route (Cameron Park), Dial-A-Ride services, Commuter Service, and the Iron Point Connector Route.

The Cameron Park Local Route circulates in the Cameron Park along Country Club Drive, Cameron Park Drive, and Green Valley Road. Request only services in available on Country Club Drive west of Cameron Park Drive and along Durock Road.

3.11.4 Regulatory Framework

Relevant regulatory and policy requirements pertaining to transportation and circulation associated with the Project environmental review are discussed below.

3.11.4.1 El Dorado County

3.11.4.1.1 General Plan

The Transportation and Circulation Element of the County General Plan, as amended, outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The goals listed below, and their associated policies, are relevant to the Project. An assessment of the Project's consistency with specific policies of the General Plan is discussed in Section 3.9, Land Use, and presented in Appendix G of this Draft SEIR.

Goal TC-1: To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods.

Goal TC-X: To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads.

Goal TC-2: To promote a safe and efficient transit system that provides service to all residents, including senior citizens, youths, the disabled, and those without access to automobiles that also helps to reduce congestion, and improves the environment.

Goal TC-3: To reduce travel demand on the County's road system and maximize the operating efficiency of transportation facilities, thereby reducing the quantity of motor vehicle emissions and the amount of investment required in new or expanded facilities.

Goal TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.

Goal TC-5: To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.

The El Dorado County Department of Transportation's 2008 *Traffic Impact Study Protocols and Procedures* sets forth the procedures for conducting transportation analysis in the County. The analysis for this Draft SEIR was prepared consistent with the County's traffic impact study protocols and procedures.

3.11.4.2 El Dorado County General Plan Circulation Map

The 2004 El Dorado County General Plan Circulation Map (Figure TC-1 of the General Plan) depicts the proposed circulation system to support existing, approved, and planned development in unincorporated El Dorado County through 2025. This circulation system is shown on the General Plan Circulation Map using a set of roadway width classifications, developed to guide the County's long-range transportation planning and programming.

As shown previously on Figure 3.9-2, "General Plan Circulation Map Excerpt," the General Plan Circulation Map identifies the connection of Bass Lake Road to Green Valley Road along the constructed segment and the proposed southern segment evaluated as the Project in this Draft SEIR.

3.11.4.3 El Dorado County Capital Improvement Program (CIP)

The County, through its Community Development Agency, prepares and regularly updates a CIP representing the County's strategy for infrastructure development and maintenance. The 2015 CIP identifies the Project evaluated in this Draft SEIR, "Silver Springs Parkway to Bass Lake Road (south segment)," as a Project in planning, design or right-of-way phase in fiscal year 2014/15 (CIP project #76108).

3.11.4.4 El Dorado County Regional Transportation Plan (RTP)

The El Dorado County Transportation Commission (EDCTC) is the Regional Transportation Planning Agency (RTPA) for El Dorado County (excluding the Tahoe Basin) and is responsible for the preparation of the El Dorado County Regional Transportation Plan (RTP). The current *El Dorado County Regional Transportation Plan 2010 - 2030* (EDCTC 2010) was developed by the EDCTC to document the policy direction, actions and funding recommendations intended to meet El Dorado County's short and long range transportation needs over a 20-year planning horizon. The RTP is designed to be a blueprint for the systematic development of a balanced, comprehensive, multi-modal transportation system.

In general, RTPs are developed to provide a clear vision of the regional transportation goals, objectives, and policies, complemented by short-term and long-term strategies for implementation. The El Dorado County RTP also serves as the El Dorado County portion of the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP). Silver Springs Parkway to Bass Lake Road is identified in the RTP's Regional Road Network Short-Term Action Plan (2010–2020).

3.11.4.5 El Dorado County Bicycle Transportation Plan

The El Dorado County Bicycle Transportation Plan (EDCTC 2010) provides a blueprint for the development of a bicycle transportation system on the western slope of El Dorado County. The 2010 plan is in compliance with the California Department of Transportation Streets and Highways Code (Sections 890-894.2), enabling the county to be eligible for State Bicycle Transportation Account funds. The Bicycle Transportation Plan addresses bicycle transportation issues and goals within the County including those related to bicycle commuting, safety and education, implementation and maintenance of bicycle facilities, the integration of bicycle and pedestrian facilities in land use development, integration of bicycle facilities with multi-modal transportation connections, funding and bicycle facilities connectivity. The Bicycle Transportation Plan also identifies existing and proposed/planned future bicycle facilities within the County.

3.11.5 Methods and Significance Criteria

The transportation and circulation evaluation considers potential impacts associated with Project construction, bicycle and pedestrian access and circulation, transit systems, and traffic operations. In accordance with CEQA, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. Informed by the CEQA Statute and Guidelines, specifically Appendix G of the CEQA Guidelines, criteria have been established for this analysis to determine whether or not the Project would have a significant impact on transportation and circulation.

Appendix G of the CEQA Guidelines, applicable standards of the El Dorado County General Plan, and the County's 2008 *Traffic Impact Study Protocols and Procedures* (El Dorado County 2008) were used to define the impact criteria and thresholds for determining whether the Project would result in one or more significant impacts related to Traffic and Transportation. Appendix G of CEQA Guidelines (Environmental Checklist Form) identifies the following issues for consideration in the evaluation of traffic and transportation impacts:

a) conflict with an applicable plan, ordinance, or policy establishing criteria for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit; substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
b) result in inadequate emergency access;
c) conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities; and/or
d) conflict with adopted policies, plans, or programs regarding the delivery of goods and services.

General Plan Circulation Policy TC-Xd provides level of service standards for County-maintained roads and state highways as follows:

- Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 as applicable shall not exceed the ratio specified in that table. [Note: None of the study roadways are presented in Table TC-2.]
- If a project causes the peak hour level of service or volume/capacity ratio on a county road or state highway that would otherwise meet the County standards (without the project) to exceed the LOS threshold, then the impact shall be considered significant.
- If any county road or state highway fails to meet the above listed county standards for peak hour level of service or volume/capacity ratios under existing conditions, and the project will "significantly worsen" conditions on the road or highway, then the impact shall be considered significant. The term "significantly worsen" is defined for the purpose of the paragraph according to General Plan Policy TC-Xe as follows:
    - A two (2) percent increase in traffic during the AM peak hour, PM peak hour or daily, OR
    - The addition of 100 or more daily trips, OR
    - The addition of 10 or more trips during the AM peak hour or the PM peak hour.

The County has published the following issues and General Plan goals as relevant to Traffic Impact Study Assessments. The project may trigger a potentially significant impact if it conflicts with any of the following issues and goals:

- Access to Public Transit Services consistent with General Plan Circulation Element Goal TC-2: To promote a safe and efficient transit system that provides service to all residents, including senior citizens, youths, the disabled, and those without access to automobiles that also helps to reduce congestion, and improves the environment.
- Transportation System Management consistent with General Plan Circulation Element Goal TC-3: To reduce travel demand on the County's road system and maximize the operating efficiency of transportation facilities, thereby reducing the quantity of motor vehicle emissions and the amount of investment required in new or expanded facilities.
- Non-Motorized Transportation consistent with General Plan Circulation Element Goal TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes."

3.11.5.1 Traffic Operations Modeling Assumptions and Methods

The traffic operations analysis consider Project impacts associated with traffic operations under existing conditions without the Project (existing) and with the Project (existing plus Project) and under future (2035) conditions without the Project (future no Project) and with the Project (future plus Project). The following sections describe assumptions used for these scenarios.

3.11.5.1.1 Existing and Existing Plus Project

Existing conditions are described above in Section 3.11.2 and are based on traffic counts and other information related to recently observed actual traffic volumes within the study area. The existing plus Project forecasts were developed by adding the Silver Springs Parkway

connection between Bass Lake Road and Green Valley Road into the El Dorado County travel demand forecasting model and running the model assignment to forecast the shift in travel due to the connection.

3.11.5.1.2 Future (Year 2035) Modeling Assumptions

The year 2035 was used as the future year for the purposes of the SEIR traffic operations analysis. To predict future no Project and future plus Project conditions, modifications incorporated into the validated base year model were incorporated into the future year (2035) travel demand forecasting model. The model was also updated to include only roadway improvements consistent with the SACOG's MTP and the County's 2013 CIP.

The future (2035) conditions analysis considered and included assumptions regarding capacity-enhancing improvements to roadway facilities in the Project study area that are planned to occur prior to year 2035. Assumed improvements were based primarily on El Dorado County's 2013 CIP (Section 8.1, "West Slope Road/Bridge Individual Project Summaries") and SACOG's MTP/SCS (Appendix A1, "MTP/SCS Project List"). These projects and a summary description of each are provided in the Project's Transportation Impact Analysis (see Table 6 in Appendix I of this Draft SEIR). The validated El Dorado County travel demand forecasting model was used to develop a.m. and p.m. peak hour forecasts for future no Project conditions, which corresponds to a 2035 horizon that accounts for planned (and funded) roadway improvements, land use growth consistent with the 2004 County General Plan, and with approved and reasonably foreseeable projects in the study area. The approved and reasonably foreseeable projects include the following:

- Bass Lake Hills Specific Plan
- Cameron Estates
- Carson Creek Specific Plan
- Dixon Ranch
- Central El Dorado Hills Specific Plan
- Lime Rock Valley Specific Plan
- Marble Valley Specific Plan
- Promontory
- Rancho Dorado
- Ridgeview
- San Stino Residential Project
- Serrano
- Tilden Park
- Valley View Specific Plan

In addition to the projects listed above, the future (2035) conditions analysis traffic volume forecasts for both the no Project and plus Project conditions include motor vehicle trips associated with the approved land use from the conditionally approved, but not yet constructed, Silver Springs residential development project located northeast of the Project site. There are three development phases associated with the Silver Springs residential development project: Unit I includes 53 single-family dwelling units, Unit II includes 134 single-family dwelling units, and Unit III includes 47 single-family dwelling units.

Occupancy of the Silver Springs residential development project is restricted to Unit I until Silver Springs Parkway is completed. Therefore, the traffic analysis of future no Project conditions assumes occupancy and associated vehicle trips for Unit I only. The traffic analysis of future plus Project conditions assumes occupancy and associated vehicle trips for all three

units. Vehicle trips associated with Unit I will have access to the existing segment of Silver Springs Parkway that connects to Green Valley Road. Vehicle trips associated with Unit I will also have access to Foxmore Lane in the Pioneer Place Subdivision east of the Silver Springs development area, and will have access to Bass Lake Road approximately 0.5 mile northeast of the proposed Silver Springs Parkway/Bass Lake Road intersection via Foxmore Lane and Lambeth Drive. Vehicle trips associated with Units II and III, which will not occur until the Project segment of Silver Springs Parkway is constructed, would access Silver Springs Parkway at two locations north of the Project segment and from there would have access to Green Valley Road to the north and Bass Lake Road to the south. These vehicle trips would also have to Bass Lake Road approximately 0.5 mile northeast of the proposed Silver Springs Parkway/Bass Lake Road intersection via Foxmore Lane and Lambeth Drive.

3.11.5.2 Construction Traffic and Activities

Impacts associated with Project-related construction traffic and activities were evaluated by considering the potential for construction-period delays in traffic operations or required detours. The Project would result in a significant construction-related traffic impact if construction activities or road closures would cause substantial traffic delays or restrict access to adjacent land uses.

3.11.5.3 Bicycle and Pedestrian Analysis Methods and Criteria

Impacts to pedestrian and bicycle circulation were evaluated by considering the degree to which construction activities, detours, traffic delays and other temporary disruptions to bicycle and pedestrian movement would be affected by the Project.

The Project would result in a significant impact to bicycle and pedestrian facilities if:

- The Project would result in extended or permanent interference with existing or planned bicycle or pedestrian facilities; or
- The Project would create unsafe conditions with regard to bicycle or pedestrian activities.

3.11.5.4 Public Transit Analysis Methods and Criteria

Impacts to transit systems were evaluated by considering the degree to which construction activities, detours, traffic delays and other temporary disruptions to transit vehicle movement would be affected by the Project. The Project would result in a significant impact to transit systems if the Project would interfere with existing or planned transit facilities or services.

3.11.6 Impacts and Mitigation Measures

Impact 3.11-1: Traffic operations under existing conditions with the Project. (Less than Significant)

Once constructed, the Project would provide an additional transportation route option between Bass Lake Road in the south to the recently constructed Silver Springs Parkway and Green Valley Road to the north. The Project would not add (i.e., generate) new trips, but would result in modified travel patterns for some motorists. Based on the modeling, as described in Section 3.11.5.1, above, the Project would attract about 120 vehicles in the a.m.

peak hour and about 140 vehicles in the p.m. peak hour to Silver Springs Parkway, attracting these trips from existing roads and intersections in the study area. Appendix B of the Traffic Impact Analysis (see Appendix I of this Draft SEIR) provides daily roadway segment volume forecasts and vehicle miles traveled forecasts for the various analysis scenarios.

Intersection Levels of Service

Table 3.11-5, "Intersection Options under Existing Plus Project Conditions," present a comparison of intersection operations under existing conditions without and with the Project. As shown in the table, the study intersection will operate acceptably (LOS E or better) with the addition of the Project. The Project would provide an alternative to the existing Green Valley Road/Bass Lake Road intersection, primarily for trips with origins or destinations to the west of that intersection. Consequently, the Green Valley Road/Bass Lake Road intersection would experience the largest decrease in vehicle delay and corresponding improvement in peak hour operation.

Table 3.11-5. Intersection Operations under Existing Plus Project Conditions

Intersection	Control	Existing Conditions (LOS/Delay)		Existing Plus Project (LOS/Delay)	
		AM	*PM*	*AM*	*PM*
1. Green Valley Road/Francisco Drive	Signal	D/41	D/40	D/41	D/40
2. Green Valley Road/El Dorado Hills Boulevard	Signal	E/64	E/58	E/67	E/58
3. Green Valley Road/Silva Valley Parkway	Signal	C/22	B/18	B/16	B/18
4. Green Valley Road/Deer Valley Road	SSSC	C/19	D/27	C/20	C/24
5. Green Valley Road/Pleasant Grove Middle School	Signal	B/11	B/13	B/11	B/15
6. Green Valley Road/Silver Springs Parkway	Signal	A/5	A/4	A/8	A/10
7. Green Valley Road/Bass Lake Road	Signal	D/42	B/17	C/22	B/12
8. Green Valley Road/Cambridge Road	Signal	C/21	B/15	C/22	B/15
9. Bass Lake Road/Serrano Parkway	Signal	B/13	A/9	B/13	A/9
10. Bass Lake Road/Silver Springs Parkway	AWSC	N/A		B/13	B/12

Source: Fehr & Peers, 2014
Notes: SSSC = side-street stop-control, AWSC = all-way stop control, N/A = Not Applicable
The average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For SSSC intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM (TRB, 2000).

Road Segment Levels of Service

Table 3.11-6, "Road Segment Operations under Existing Plus Project Conditions," summarizes a.m. and p.m. peak hour roadway segment operation under existing conditions without and with the Project. Under both conditions, most study area roadway segments are predicted to operate acceptably with most roadway segments operating at LOS C or better during the a.m. peak hour and LOS D or better during the p.m. peak hour. The two-lane segment of Green Valley Road between the County line and just west of Sophia Parkway is predicted to operate at LOS F during the p.m. peak hour under existing conditions without the Project. The Project would result in slightly less traffic (i.e., about 10 vehicles) during the p.m. peak hour on this segment of Green Valley Road, but would still operate at LOS F during the p.m. peak hour. Because this segment is predicted to operate unacceptably under existing conditions without the Project and the Project is not predicted to worsen this condition, the Project impact is considered less than significant.

Table 3.11-6. Road Segment Operations under Existing Plus Project Conditions

Roadway Segment	Type	Existing						Existing Plus Project					
		AM			PM			AM			PM		
		VOL	*V/C*	*LOS*	*VOL*	*V/C*	*LOS*	*VOL*	*V/C*	*LOS*	*VOL*	*V/C*	*LOS*
GREEN VALLEY ROAD													
County Line to West of Sophia Parkway	2A	1,467	0.89	D	1,797	**1.09**	**F**	1,480	0.90	D	1,790	**1.08**	**F**
West of Sophia Parkway to Just East of Francisco Drive	4AD	1,546	0.47	C or better	2,114	0.64	D	1,560	0.47	C or better	2,100	0.64	D
East of Francisco Drive to El Dorado Hills Boulevard	2A	1,015	0.62	D	1,121	0.68	D	1,030	0.62	D	1,110	0.67	D
El Dorado Hills Boulevard to Silva Valley Parkway	2A	863	0.52	D	1,088	0.66	D	870	0.53	D	1,080	0.65	D
Silva Valley Parkway to Malcolm Dixon Road	2A	707	0.43	C or better	987	0.60	D	720	0.44	C or better	980	0.59	D
Malcolm Dixon Road to Deer Valley Road	2A	688	0.42	C or better	872	0.53	D	700	0.42	C or better	860	0.52	D
Deer Valley Road to Silver Springs Parkway	2A	762	0.46	C or better	862	0.52	D	800	0.48	C or better	930	0.56	D
Silver Springs Parkway to Bass Lake Road	2A	762	0.46	C or better	862	0.52	D	700	0.42	C or better	810	0.49	C or better
Bass Lake Road to Cameron Park Road	2A	774	0.47	C or better	965	0.58	D	760	0.46	C or better	960	0.58	D
BASS LAKE ROAD													
Green Valley Road to Silver Springs Parkway	2A	582	0.35	C or better	538	0.33	C or better	500	0.30	C or better	460	0.28	C or better
Silver Springs Parkway to Serrano Parkway	2A	726	0.44	C or better	772	0.47	C or better	740	0.45	C or better	780	0.47	C or better
Serrano Parkway to U.S. 50	2A	935	0.57	D	859	0.52	D	930	0.56	D	870	0.53	D

Table 3.11-6. Road Segment Operations under Existing Plus Project Conditions													
Roadway Segment	Type	Existing						Existing Plus Project					
		AM			PM			AM			PM		
		VOL	*V/C*	*LOS*	*VOL*	*V/C*	*LOS*	*VOL*	*V/C*	*LOS*	*VOL*	*V/C*	*LOS*
SILVER SPRINGS PARKWAY													
South of Green Valley	2A	-	-	-	-	-	-	120	0.07	C or better	140	0.08	C or better
Extension to Bass Lake Road	2A	-	-	-	-	-	-	120	0.07	C or better	140	0.08	C or better

Notes: Peak hour roadway segment capacities based on the HCM 2010 and developed by El Dorado County Community Development Agency, Long Range Planning.
Type (of facility): 4AU = 4-Lane Undivided Arterial, 4AD = 4-Lane Divided Arterial, 2A = 2-Lane Arterial
Shaded bold text indicates LOS worse than the established acceptable condition.
Source: Fehr & Peers, 2014

Impact 3.11-2: Traffic operations under future conditions with the Project. (Significant)

Once constructed and through the foreseeable future, the Project would provide a transportation route option between Bass Lake Road in the south to the recently constructed Silver Springs Parkway and Green Valley Road to the north. The Project itself would not add (i.e., generate) new trips, but would result in modified travel patterns for some motorists. The analysis of future (2035) conditions without the Project, assumes that additional development within the region have occurred and that several roadway improvement projects have also occurred, as discussed above in Section 3.11.5.1.2. Also as discussed in Section 3.11.5.1.2, occupancy of the 53 single-family residential units planned as Unit I of the Silver Springs development project is assumed to have occurred under the future no Project condition. Under the future-with-Project condition, these developments and roadway improvements are also assumed to have occurred. In addition, although the Project would not directly generate or add vehicle trips, the future-with-Project condition assumes occupancy of Unit II (134 single family dwelling units) and Unit III (47 single family dwelling units) of the Silver Springs development since occupancy of these units is conditioned on completion of the Silver Springs Parkway connection between Bass Lake Road and Green Valley Road. Therefore, the predicted changes in study area traffic volumes under future-with-Project conditions as compared to future-without-Project conditions is associated in part with changes in route choices due to improved accessibility and options and in part due to new traffic generated by Unit II and Unit III of the Silver Springs development.

The analysis of future conditions indicates that the Project would serve about 310 vehicles in the a.m. peak hour and about 330 vehicles in the p.m. peak hour. Appendix B of the Traffic Impact Analysis (see Appendix I of this Draft SEIR) provides daily roadway segment volume forecasts and vehicle miles traveled forecasts for the various analysis scenarios.

The sections below discuss projected levels of services under future (2035) conditions for intersections and road segments.

Intersection Levels of Service

Table 3.11-7, "Intersection Operations—Future Conditions," summarizes a.m. and p.m. peak hour intersection operation under future (2035) conditions based on assumptions discussed above. The analysis indicates that most study intersections would operate acceptably under future (2035) conditions without and with the Project. Three intersections on Green Valley Road are predicted to operate unacceptably under future (2035) conditions both without and with the Project; these are the Deer Valley Road, Bass Lake Road, and Cambridge Road intersections with Green Valley Road, shown with shaded bold text in the table. Each of these intersections is discussed further below.

Green Valley Road/Deer Valley Road (Intersection 4)—This intersection is predicted to operate unacceptably at LOS E during the a.m. peak hour and LOS F during the p.m. peak hour without the Project, and improvements are needed at this intersection to achieve acceptable levels of service. The Project analysis, which assumes occupancy of Units II and III of the Silver Springs residential development, indicates increased traffic through the intersection for the northbound side-street stop controlled approach under p.m. peak hour conditions. The increased traffic under the future (2035) with-Project scenario at a location predicted to operate unacceptable without the Project is considered to be a significant impact for the purposes of this analysis. However, with or without the Project, traffic volumes at this intersection will be monitored by the County and signalization will be added to the CIP when traffic signal warrants are met. Although for the purposes of disclosure the analysis provides the predicted level of service at this intersection without a traffic signal, the County's commitment to install a traffic signal at this location when warrants are met is considered sufficient to reduce this impact to less than significant.

Green Valley Road/Bass Lake Road (Intersection 7)—This intersection is predicted to operate unacceptably at LOS F without the Project during the a.m. peak hour, and improvements are needed at this intersection to achieve acceptable levels of service. The Project would result in fewer trips using critical turning movements during the a.m. peak hour. This reduction in trips and critical turning movements would decrease the average control delay during the a.m. peak hour. However, even with the reduced delay, the level of service would remain unacceptable at LOS F. Because the Project does not result in additional traffic or delay, the Project would not result in an adverse impact at this location.

Green Valley Road/Cambridge Road (Intersection 8)—This intersection is predicted to operate unacceptably at LOS F without the Project during the a.m. peak hour, and improvements are needed at this intersection to achieve acceptable levels of service. The Project would result in fewer trips using critical turning movements during the a.m. peak hour. This reduction in trips and critical turning movements would decrease the average control delay during the a.m. peak hour. However, even with the reduced delay, the level of service would remain unacceptable at LOS F. Because the Project does not result in additional traffic or delay, the Project would not result in an adverse impact at this location.

Table 3.11-7. Intersection Operations—Future Conditions					
Intersection	**Control**	**Cumulative Conditions (LOS/Delay)**		**Cumulative Plus Project (LOS/Delay)**	
		AM	***PM***	***AM***	***PM***
1. Green Valley Road/Francisco Drive	Signal	D/43	D/42	D/41	D/43
2. Green Valley Road/El Dorado Hills Boulevard	Signal	C/22	B/19	C/22	B/19
3. Green Valley Road/Silva Valley Parkway	Signal	D/35	C/31	D/35	C/31
4. Green Valley Road/Deer Valley Road	SSSC	**E/50**	**F/>50**	**E/47**	***F/>50***
5. Green Valley Road/Pleasant Grove Middle School	Signal	B/15	C/23	B/17	C/27
6. Green Valley Road/Silver Springs Parkway	Signal	A/6	A/10	B/20	C/22
7. Green Valley Road/Bass Lake Road	Signal	**F/>80**	D/42	**F/>80**	C/28
8. Green Valley Road/Cambridge Road	Signal	**F/>80**	D/48	**F/>80**	D/45
9. Bass Lake Road/Serrano Parkway	Signal	C/34	C/32	C/34	C/32
10. Bass Lake Road/Silver Springs Parkway	AWSC	N/A	N/A	D/28	C/17

Source: Fehr & Peers, 2014
Notes: SSSC = side-street stop-control, AWSC = all-way stop control, N/A = Not Applicable
Shaded bold text indicates LOS worse than established threshold. Italicized text identifies a significant impact.
The average del average delay is measured in seconds per vehicle. For signalized and AWSC intersections, the delay shown is the average control delay for the overall intersection. For SSSC intersections, the LOS and control delay for the worst movement is shown. Intersection LOS and delay is calculated based on the procedures and methodology contained in the HCM (TRB, 2000).

Road Segment Levels of Service

Table 3.11-8, "Roadway Segment Operations—Future Conditions," summarizes a.m. and p.m. peak hour roadway segment operation under cumulative conditions without and with the Project. All study area roadway segments operate acceptably with most roadway segments operating at LOS C or better during the a.m. peak hour and LOS D or better during the p.m. peak hour. As discussed, the Project would serve about 310 vehicles in the a.m. peak hour and about 330 vehicles in the p.m. peak hour under predicted future (2035) conditions. Consistent with the intersection operations discussed above, the Project would provide an alternative to the segment of Green Valley Road (between Silver Springs Parkway and Bass Lake Road) and Bass Lake Road (between Green Valley Road and Silver Springs Parkway). These segments would see the largest decrease in traffic due to the addition of the Project. However, the change in traffic volumes predicted on these segments under conditions with the Project is less than under

future (2035) conditions without the Project due to the added trips generated by the Silver Springs development project.

Table 3.11-8. Roadway Segment Operations—Future Conditions

Roadway Segment	Type	Cumulative						Cumulative Plus Project					
		AM			PM			AM			PM		
		VOL	*VC*	*LOS*	*VOL*	*VC*	*LOS*	*VOL*	*VC*	*LOS*	*VOL*	*VC*	*LOS*
GREEN VALLEY ROAD													
County Line to West of Sophia Parkway	4AU	1,530	0.49	C or better	1,900	0.61	D	1,540	0.49	C or better	1,900	0.61	D
West of Sophia Parkway to East of Francisco Drive	4AD	1,580	0.48	C or better	2,150	0.65	D	1,570	0.48	C or better	2,160	0.66	D
East of Francisco Drive to El Dorado Hills Boulevard	4AU	1,310	0.42	C or better	1,530	0.49	C or better	1,330	0.42	C or better	1,540	0.49	C or better
El Dorado Hills Boulevard to Silva Valley Parkway	4AU	1,500	0.48	C or better	1,920	0.61	D	1,520	0.49	C or better	1,930	0.62	D
Silva Valley Parkway to Malcolm Dixon Road	4AU	1,250	0.40	C or better	1,600	0.51	C or better	1,270	0.41	C or better	1,640	0.52	C or better
Malcolm Dixon Road to Deer Valley Road	4AU	1,140	0.36	C or better	1,420	0.45	C or better	1,170	0.37	C or better	1,470	0.47	C or better
Deer Valley Road to Silver Springs Parkway	2A	1,150	0.70	D	1,270	0.77	D	1,230	0.75	D	1,350	0.82	D
Silver Springs Parkway to Bass Lake Road	2A	1,150	0.70	D	1,230	0.75	D	1,020	0.62	D	1,130	0.68	D
Bass Lake Road to Cameron Park Road	2A	1,240	0.75	D	1,480	0.90	D	1,220	0.74	D	1,460	0.88	D
BASS LAKE ROAD													
Green Valley Road to Silver Springs Parkway	2A	870	0.53	D	830	0.50	C or better	690	0.42	C or better	700	0.42	C or better
Silver Springs Parkway to Serrano Parkway	4AD	1,130	0.34	C or better	1,200	0.36	C or better	1,170	0.36	C or better	1,260	0.38	C or better
Serrano Parkway to U.S. 50	4AD	1,180	0.36	C or better	1,220	0.37	C or better	1,210	0.37	C or better	1,260	0.38	C or better
SILVER SPRINGS PARKWAY													
South of Green Valley	2A	40	0.02	C or better	100	0.06	C or better	300	0.18	C or better	320	0.19	C or better
Extension to Bass Lake Road	2A	-	0.00	C or better	-	0.00	C or better	310	0.19	C or better	330	0.20	C or better

Source: Fehr & Peers 2014
Notes: LOS = level of service; VC = volume/capacity ratio; VOL = volume;
Peak hour roadway segment capacities based on the HCM 2010 and developed by El Dorado County Community Development Agency, Long- Range Planning.
Facility Type: 4AU = 4-Lane Undivided Arterial, 4AD = 4-Lane Divided Arterial, 2A = 2-Lane Arterial

Impact Summary and Mitigation Requirements

As discussed above, the Green Valley Road/Deer Valley Road intersection is predicted to operate at unacceptable levels of service under future (2035) conditions both without and

with the Project. The Project would not generate any new vehicle trips. However, the analysis considers an increase in trips associated with development of the Silver Springs residential development project Units II and III and changes in traffic circulation associated with the new road to the Project. When these factors are attributed to the Project for the purposes of the analysis conducted for this Draft SEIR, the analysis concludes that the Project would contribute trips and delay at this location during the p.m. peak hour, resulting in a significant impact. However, with or without the Project, traffic volumes at this intersection will be monitored by the County and signalization will be added to the CIP when traffic signal warrants are met. Although for the purposes of disclosure the analysis provides the predicted level of service at this intersection without a traffic signal, the County's commitment to install a traffic signal at this location when warrants are met is considered sufficient to reduce this impact to less than significant.

Installation of a traffic signal at this location would achieve acceptable operations under future (2035) conditions without and with the Project. Because traffic signal installation is an improvement required under future (2035) conditions without the Project and is not needed solely as a result of the Project, Mitigation Measure 3.11-2 does not require the County to install a signal as a component of the Project and instead requires that the improvement be added to the County Capital Improvement Program and that signalization of the intersection be installed when warranted. Implementation of Mitigation Measure 3.11-2 would reduce this impact to less than significant.

Mitigation Measure 3.11-2: ***Signalization of the Deer Valley Road/Green Valley Road intersection shall be added to the County's Capital Improvement Program.***

The County shall amend its Capital Improvement Program (CIP) at such time the County deems it necessary to include installation of a traffic control signal at the Deer Valley Road/Green Valley Road intersection at such time a signal at this location is warranted.

Significance with Mitigation: Less than Significant

Impact 3.11-3: Traffic congestion and delays resulting from construction activities and lane closures. (Less than Significant)

Construction of the Project would require work within and adjacent to vehicle travel lanes and could require lane closures or route restrictions along Bass Lake Road in the vicinity of the proposed Silver Springs Parkway/Bass Lake Road intersection. Lane or road closures during construction would create the potential to temporarily delay motor vehicle trips. The majority of the activities associated with constructing the Project would take place in an area where very limited motor vehicle travel presently occurs (private access for three residential properties along Sandhurst Hill Road). However, construction activities on the Project segment of Bass Lake Road may require traffic controls, temporary lane closures, and/or traffic lane diversions to ensure safe and efficient movement of vehicles, bicyclists and pedestrians during construction.

As discussed in Chapter 2, construction contract provisions would require that a Traffic Management Plan be prepared. The Traffic Management Plan would include construction

staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic during construction. In the event that full roadway closures are necessary during Project construction, provisions for vehicle movement through the Project area with minimal delays would be provided. Any temporary traffic diversions, lane closures or detours would be properly signed; and barriers, striping, and cones would be used as necessary to guide traffic and delineate temporary routes. Flagpersons would monitor and guide traffic during periods of equipment movement or when construction activities were occurring near traffic lanes to ensure public and worker safety. In the event that full roadway closures are necessary during Project construction, provisions for local residential access would be provided.

With implementation of the Traffic Management Plan, it is reasonably anticipated that any delays would be short-term and of limited duration and this impact is considered less than significant.

Impact 3.11-4: Potential effects on bicycle and pedestrian circulation. (Less than Significant)

The Project includes Class II bicycle lanes and sidewalks along the proposed extension of Silver Springs Parkway. The Silver Springs Parkway/Bass Lake Road intersection would include pedestrian cross walks. The Project would connect to existing pedestrian and bicycle facilities on the recently construction segment of Silver Springs Parkway and to Green Valley Road to north, providing a new connection in the transportation network between Green Valley Road and Bass Lake Road with continuous bicycle and pedestrian facilities. Once completed, the Project would provide a benefit to pedestrian and bicycle circulation.

During construction, potential lane restrictions, trenching and resurfacing activities could result in temporary uneven or unpaved surfaces and restricted or unsafe conditions for bicyclists and pedestrians in the construction area. As discussed previously, the Project would include construction contract special provisions that require the preparation and implementation of a Traffic Management Plan. The Traffic Management Plan would include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic, bicycle and pedestrian circulation during construction. Provisions for bicycle and pedestrian circulation during construction are required pursuant to the construction contract special as described in Chapter 2. With implementation of the Traffic Management Plan, it is reasonably anticipated that delays or potential unsafe conditions would be sufficiently minimized and this impact is considered less than significant.

Impact 3.11-5: Potential effects on transit system operations. (Less than Significant)

Transit services within the Project area would be subject to the same potential delays during Project construction as those discussed for motor vehicles at Impact 3.4-3. The development and implementation of a traffic control plan for the Project would minimize the potential for delays to transit system operations, and this impact is considered less than significant. Silver Springs Parkway would provide additional routing options for transit vehicles and would not adversely affect transit operations. Although it is not currently known whether transit system

operations would incorporate this option into their routes, the option would be expected to have either no impact or a beneficial impact to transit system operations.

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CHAPTER 4
ADDITIONAL CEQA CONSIDERATIONS

CHAPTER 4—ADDITIONAL CEQA CONSIDERATIONS

4.1 Introduction

In addition to the resource-specific Project impact evaluation presented in Chapter 3 of this Environmental Impact Report (EIR), the California Environmental Quality Act (CEQA) requires that additional considerations, such as cumulative impacts, significant irreversible environmental changes, and growth-inducing effects of a Project, be addressed in an EIR. Each of these additional considerations is addressed in this chapter.

4.2 Cumulative Impacts

CEQA requires an EIR to include examination of a project's cumulative impacts. As discussed in CEQA Guidelines Section 15130(a)(1), a cumulative impact "consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

CEQA Guidelines Section 15355 defines cumulative impacts as:

> "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, or reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively, significant projects taking place over a period of time."

4.2.1 Cumulative Impact Analysis Methodology

CEQA Guidelines Section 15130(b) authorizes a cumulative impacts analysis to use a summary of projections contained in an adopted general plan and its associated environmental documentation. The 1992 Bass Lake Road Realignment EIR provides a brief discussion of cumulative impacts associated with air pollutant emissions (carbon monoxide concentrations) and construction noise, and includes the determination that in both instances the Project would not result in cumulative impacts. The analysis presented here supersedes the 1992 EIR cumulative impact analysis.

For the purposes of the cumulative impact analysis in this Draft Subsequent EIR (Draft SEIR), the study area for which potential cumulative effects are examined is the general vicinity of the Project in western El Dorado County. In keeping with this "summary of projections" approach, the potential future conditions have been assessed by reviewing the 2004 El Dorado County General Plan (El Dorado County 2004a) and the General Plan EIR (El Dorado County 2004b).

The Final EIR for the County General Plan includes the (1) Draft EIR (State Clearinghouse Number 2001082030), three volumes, dated May 2003; (2) Response to Comments on the Draft

EIR and Draft General Plan, six volumes, dated January 2004; and (3) Environmental Assessment of General Plan Policy Modifications, dated June 2004, and Environmental Assessment of Revisions to Mitigation Measures, dated June 2004. The General Plan Final EIR is available for review at:

El Dorado County Development Services Department—Planning Services
2850 Fairlane Court
Placerville, CA 95667
(530) 621-5355

The General Plan Final EIR is also available in PDF format from the County's website at: http://www.co.el-dorado.ca.us/Planning/GeneralPlanEIR.htm.

This cumulative impact analysis considers the changes to the environment likely to result from future conditions, as envisioned in the County General Plan, in combination with the Project. It is important to note that the Project is identified as a roadway improvement in the County General Plan. As such, the impact analysis conducted for the General Plan EIR included consideration of the general aspects of the Project. Although the General Plan EIR evaluation serves as a the basis for much of the cumulative analysis presented here, the analysis also considers the potential for cumulative impacts associated with more localized circumstances, which the General Plan EIR analysis was not intended to address.

4.2.2 Aesthetics

Of relevance to this cumulative impact analysis, the General Plan EIR identified a significant visual impact associated with development of new roads within the County. The Project-specific impacts to visual resources identified in Section 3.2.5 are listed below, and each is followed by a discussion of the impact's potential to contribute to impacts associated with other past, present, and reasonably foreseeable probable future projects.

Impact 3.2-1: Temporary degradation of visual character resulting from construction activities. The temporary degradation of visual character that would occur during Project construction as a result of visible construction equipment and activities would create a potential to combine with other permanent or temporary visual effects from construction and development within the Project area. However, temporary visual impacts associated with Project construction are localized and would have a low potential to contribute substantially to other adverse visual changes within the Project area. Therefore, temporary Project construction activities would not result in a considerable contribution to adverse cumulative visual effects within the Project area.

Impact 3.2-2: Permanent alteration of existing visual character of the Project site as viewed from adjacent areas. The Project would contribute a new physical feature within the Project area that would detract from the existing visual quality of the area. However, Mitigation Measure 3.2-2 requires landscaping to be installed within 3 years of Project construction and is considered sufficient to reduce this Project-specific impact to less than significant. The General Plan EIR determined impacts would occur from roadway development in the County and may be significant and unavoidable. The Project would contribute to existing, ongoing, and future anticipated development within the area and would contribute to increasing the existing suburban

environment of the Project area. Because the Project-specific visual impact is considered less than significant with mitigation, and because the Project is consistent with the types of existing and anticipated future development within the Project area, the Project would not result in a substantial contribution to changes in the visual character and this cumulative impact is considered less than significant.

Impact 3.2-3: Light and glare from motor vehicles. The Project would introduce through-travel motor vehicle use on the Project segment of Silver Springs Parkway. Vehicle headlights from these motorists would add a new source of lighting visible from residential properties immediately adjacent to, and some at greater distances from, the Project site. However, the new roadway alignment currently has minimal lighting sources and there are no reasonably foreseeable probable future projects that would contribute additional lighting in the immediate vicinity of the Project segment of Silver Springs Parkway. Thus, the Project would not result in a considerable increase in an adverse cumulative impact associated with light and glare and would, therefore, not result in a significant cumulative impact.

4.2.3 Air Quality and Greenhouse Gases

The General Plan EIR identified air quality impacts associated with construction emissions of reactive organic gas (ROG), oxides of nitrogen (NO_x), and respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM_{10}); long-term operational (regional) emissions of ROG, NO_x and PM_{10}; toxic air emissions; and local mobile-source emissions of carbon monoxide and odorous emissions. The El Dorado County Air Quality Management District 2002 Guide to Air Quality Assessment (Guide) (EDCAQMD 2002) establishes that air pollutant emissions of a proposed project are considered cumulatively significant if one or more of the following conditions is met:

1. The project requires a change in the existing land use designation (i.e., general plan amendment, rezone), and projected emissions (ROG, NO_x, carbon monoxide [CO], or PM_{10}) are greater than the emissions anticipated for the site if developed under the existing land use designation.
2. The project would individually exceed any significance criteria in the Guide.
3. For impacts that are determined to be significant under the Guide, the lead agency for the project does not require the project to implement the emission reduction measures contained in and/or derived from the Air Quality Attainment Plan (AQAP).
4. The project is located in a jurisdiction that does not implement the emission reduction measures contained in and/or derived from the AQAP.

The Project would not have the potential for contributing a considerable increase in cumulative effects based on these criteria listed above. Further, and as discussed at Impact 3.5-7 in Chapter 3, GHG emissions associated with Project construction would be fully offset by reduced GHG emissions associated with motor vehicle emissions once the new road is open. This offset would occur within one year, and the Project would have a net reduction in overall GHG emissions. Therefore, the Project would not result in a substantial contribution to cumulative impacts associated with GHG emissions.

4.2.4 Biological Resources

Of relevance to the cumulative impact assessment, the General Plan EIR identified biological resources impacts associated with loss and fragmentation of wildlife habitat; impacts on special-status species; impacts on wildlife movement; and removal, degradation, and fragmentation of sensitive habitats and oak woodlands. The Project-specific biological resources impacts identified in Section 3.4.5 are discussed below in terms of their potential to contribute to impacts associated with other past, present, and reasonably foreseeable probable future projects.

Impact 3.4-1: Loss of suitable habitat for potentially occurring special-status plant species. Ground disturbance associated with the Project would result in the temporary disturbance and permanent removal of 2.95 acres of annual grassland, 2.51 acres of blue oak woodland, 3.40 acres of riparian woodland, and 0.71 acres of chaparral, which provides habitat for potentially occurring listed and non-listed special status plants. Temporary disturbance and permanent removal would affect special-status plants, if present, through removal of the individuals and elimination of their habitat. Mitigation Measure 3.4-1 includes provisions to avoid or minimize this impact and is considered sufficient to reduce the potential impact to less than significant. Mitigating potential Project-specific impacts to special-status plant species and the relatively small potential disturbance area associated with the Project results in a reasonable determination that the Project would not result in a considerable increase in an adverse cumulative impact associated with special-status plant species and would, therefore, not result in a significant cumulative impact.

Impacts 3.4-2 through 3.4-9: Potential effects on special-status animal species. Impacts 3.4-2 through 3.4-9 identify that Project construction activities and temporary and permanent habitat disturbance could result in Project-specific impacts to the following special-status animal species: Cosumnes spring stonefly, Valley elderberry longhorn beetle, coast horned lizard, California red-legged frog, foothill yellow-legged frog, western pond turtle, raptors and other migratory birds, Western burrowing owl, and special-status bat species. Mitigation Measures 3.4-2 through 3.4-9 contain provisions to avoid or minimize these potential impacts, including preconstruction surveys, relocation of individuals, and/or compensatory mitigation, including permanent preservation of suitable habitat. Mitigating potential Project-specific impacts to special-status animal species and the relatively small potential disturbance area associated with the Project results in a reasonable determination that the Project would not result in a considerable increase in an adverse cumulative impact associated with special-status animal species and would, therefore, not result in a significant cumulative impact.

Impact 3.4-10: Potential effects on waters of the United States, waters of the state, and wetlands. Impact 3.4-10 identifies that construction activities necessary for the permanent placement of the new and related facilities would fill an existing pond within the Project site with earthen material and the pond would be eliminated. The Project would also result in partial fill of intermittent drainages within the Project site. In is estimated that approximately 2.09 acres of jurisdictional waters could be adversely affected or permanently lost as a result of the Project. Mitigation Measure 3.4-10 contains provisions requiring avoidance to the extent feasible and compensation of any permanently removed wetlands sufficient to achieve no net loss of this habitat type. Mitigating Project-specific impacts waters of the United States, waters of the state, and wetlands as required by Mitigation Measure 3.4-10 would minimize Project-specific impacts

sufficiently to result in a reasonable determination that the Project would not result in a considerable increase in an adverse cumulative impact associated with the loss of this habitat and would, therefore, not result in a significant cumulative impact.

Impact 3.4-11: Potential effects on oak woodlands. As discussed at Impact 3.4-11, the Project, as currently defined, would result in the removal of approximately 5.37 acres of oak canopy, comprising 2.74 acres within permanent disturbance areas and 2.63 acres within temporary disturbance areas. To mitigate the biological resources impact associated with the loss of oak woodlands associated with the Project, a combination of avoidance, protection, on-site replacement, where feasible, and off-site preservation or creation of oak woodland habitat is identified in Mitigation Measure 3.4-11. The County's requirements for Project-specific mitigation of impacts to oak woodlands are considered sufficient to avoid a considerable contribution to cumulative impacts to oak woodlands within the County.

4.2.5 Cultural Resources

Of relevance to the cumulative impact assessment, the General Plan EIR identified one cultural resources impact associated with destruction or alteration of known and unknown prehistoric and historic sites, features artifacts and human remains. The Project-specific cultural resources impact identified in Section 3.5.5 is discussed below in terms of its potential to contribute to impacts associated with other past, present, and reasonably foreseeable probable future projects.

Impact 3.5-1: Disturbance or destruction of previously unidentified cultural resources and human remains during construction. As discussed in Impact 3.5-1, no significant cultural resources have been identified within the Project disturbance area. The Project's potential to disturb or destroy currently unidentified cultural resources or human remains would contribute cumulatively to the potential for similar disturbance or destruction from other development within the County as identified in the General Plan. Mitigation Measure 3.5-1 requires that the County incorporate cultural resources and human remains inadvertent discovery programs into construction contract documents. Implementation of this mitigation measure would minimize Project-specific impacts sufficiently to result in a reasonable determination that the Project would not result in a considerable increase in an adverse cumulative impact associated with potential effects on cultural resources and human remains, and would not result in a significant cumulative impact.

4.2.6 Geology and Soils

Of relevance to this cumulative impact analysis, the General Plan EIR identified a less-than-significant geology and soils impact associated with increased development in areas potentially subject to seismic hazards. The Project-specific geology and soils impacts identified in Section 3.6.5 are discussed below in terms of their potential to result in a substantial contribution to cumulative impacts.

Impact 3.6-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving seismic events or landslides. This Project impact is similar to that identified in the General Plan EIR. However, potential

damage to Project facilities is a Project-specific impact only, and this impact would not contribute cumulatively to the risk of damage to other facilities from seismic events.

Impact 3.6-2: Potential to result in substantial soil erosion or the loss of topsoil. The Project would result in the potential for increased soils erosion and sedimentation. The Project Storm Water Pollution Prevention Plan (SWPPP) would identify best management practices (BMPs) that would be implemented to reduce potential erosion impacts to less than significant levels and the Project would not result in the potential for a considerable contribution to potential cumulative impacts associated with erosion.

Impact 3.6-3: Potential to be located on a geologic unit or soil that could become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and potential to be located on expansive soils that could create risk of damage. As discussed in Impact 3.6-3, it is not anticipated that Project facilities would be susceptible to substantial risk of lateral spreading, subsidence, liquefaction or collapse. The County would conduct site-specific geotechnical analysis and incorporate recommendations pertaining to soils stability into the final Project design which would ensure that potential erosion impacts associated with the Project would be less than significant. No adjacent conditions have been identified to which this Project impact would result in a contribution to potential cumulative impacts.

4.2.7 Hazards and Hazardous Materials

Of relevance to this cumulative impact analysis, the General Plan EIR identified human health and safety impacts associated with increased risk of exposure from routine use of hazardous materials, increased risk of exposure to hazardous waste resulting from new development on known, suspected and unknown contaminated sites, and public exposure to naturally occurring asbestos. The Project-specific hazards and hazardous materials impacts identified in Section 3.7.5 are site specific and would be avoided or minimized through Project-specific mitigation measures. Therefore, the Project would not result in the potential for a considerable contribution to cumulative effects associated with hazards and hazardous materials.

4.2.8 Hydrology and Water Quality

Of relevance to this cumulative impact analysis, the General Plan EIR identified a less-than-significant impact associated with an increase in water pollutants from construction-related activities and increase in water pollutants from new impervious surfaces and new urban and agricultural uses. The Project-specific hydrology and water quality impacts identified in Section 3.8.5 are discussed below in terms of their potential to result in a substantial contribution to cumulative impacts.

Impact 3.8-1: Potential to violate a water quality standard or waste discharge requirement or otherwise provide a substantial additional source of polluted runoff. The Project would result in the potential for increased sedimentation and impacts on surface water quality. As discussed above, the Project SWPPP would identify BMPs that would be implemented to reduce potential erosion impacts to less-than-significant levels, and the Project would not result in a cumulatively considerable contribution to sedimentation or water quality.

Although the Project is required to implement a SWPPP, Mitigation Measure 3.8-1 is identified in this Draft SEIR to specify this requirement and provide a mechanism for the County's oversight to ensure this potentially significant impact associated with adverse water quality impacts during construction is avoided. Implementation of Mitigation Measure 3.8-1 would reduce this Project-specific impact to less than significant and would also ensure that the Project would not result in a substantial contribution to cumulative water quality impacts.

Impact 3.8-2: Potential to 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 preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). Impact 3.8-2 identifies that the Project would not result in the potential to substantially interfere with groundwater recharge and would not result in the substantial depletion of groundwater. The Project would, therefore, not have the potential to result in a substantial contribution to cumulative groundwater impacts.

Impact 3.8-3: Potential to substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation or flooding on- or off-site. Impact 3.8-3 identifies that with appropriate design, existing drainage patterns would not be significantly altered and therefore erosion, siltation, or flooding would not cause on- or off- site impacts. This impact would be less than significant. Mitigation Measure 3.8-3 requires preparation and incorporation of design recommendations contained in a final drainage plan to ensure that no significant drainage impacts result from the Project. The Project would, therefore, not have the potential to result in a substantial contribution to cumulative drainage impacts.

4.2.9 Land Use and Planning

As discussed in Section 3.9.5, with implementation of Mitigation Measure 3.9-1, the Project would be consistent with the County General Plan and would contribute to achieving the roadway network identified in the General Plan Circulation Element and Circulation Map. Mitigation Measure 3.9-1 requires the County to confirm consistency with the General Plan pertaining to Policy 7.4.4.4 regarding oak woodlands. Implementation of Mitigation Measure 3.9-1 would ensure consistency with the General Plan. The Project would not conflict with existing or potential future land uses and would not conflict with El Dorado County Board of Supervisors Resolution No. 29-2008. Therefore, the Project would not create a potential for adverse cumulative impacts associated with land use.

4.2.10 Noise

The General Plan EIR identified noise impacts associated with exposure of noise-sensitive land uses to short-term (construction) noise, exposure to ground transportation noise sources, exposure of noise-sensitive land uses to fixed or nontransportation noise sources, and exposure to aircraft noise. The Project-specific noise impacts identified in Section 3.10.5 are discussed below in terms of their potential to result in a substantial contribution to cumulative impacts.

Impact 3.10-1: Construction noise would cause short-term variations in the ambient noise environment during construction in proximity to existing residences. Impact 3.10-1 identifies that Project construction noise would be short-term and typical for construction activities. Although the impact is considered less than significant, Mitigation Measure 3.10-1 is recommended to further reduce potential construction-related noise impacts. The General Plan EIR identifies that construction noise is a significant and unavoidable impact of the General Plan. Because the Project would not result in atypical construction noise levels and Project construction activities would be a short-term noise source, construction noise associated with the Project is not expected to result in a substantial contribution to cumulative construction noise impacts.

Impact 3.10-2: Increases in predicted traffic noise levels at adjacent sensitive receivers. Impact 3.10-2 identifies that the Project would result in a less-than-significant increase in traffic noise at adjacent sensitive receptors under existing and future (2035) conditions. The noise analysis of future conditions provides a measure of cumulative future conditions. Thus, the determination that the Project would have a less-than-significant impact associated with future traffic noise is also sufficient for determining that the Project would not result in a substantial contribution to cumulative traffic noise impacts.

Impact 3.10-3: Potential for excessive groundborne vibration from vehicle travel on Silver Springs Parkway. Ground-borne vibration from motor vehicles was not identified as an impact in the General Plan EIR. The Project analysis of this impact considers the Project's potential for localized impacts associated with motor vehicles on the proposed Project segment of Silver Springs Parkway and determined the impact would be less than significant. Therefore, it can be reasonably concluded that the Project would not result in a substantial contribution to cumulative groundborne vibration.

4.2.11 Traffic and Transportation

The General Plan EIR identified traffic and circulation impacts associated with potential inconsistencies with level of service (LOS) policies, increases in daily and peak-hour traffic, short-term unacceptable LOS conditions related to generation of new traffic in advance of transportation improvements, and insufficient transit capacity. The Project-specific traffic and transportation impacts identified in Section 3.11.5 are discussed below in terms of their potential to result in a substantial contribution to cumulative impacts.

Impacts 3.11-1 and 3.11-2: Traffic operations under existing and future conditions with the Project. Impact 3.11-1 presents an evaluation of potential traffic impacts associated with the Project under existing conditions and Impact 3.11-2 presents the evaluation of potential traffic impacts of the Project under future (2035) conditions. Under future conditions, the Project was found to contribute to a level of service deficiency at one study area intersection: Deer Valley Road/Green Valley Road and Mitigation Measure 3.11-2 requires the County to include signalization of this intersection in the County Capital Improvement Program when warranted. With implementation of Mitigation Measure 3.11-2, the Project would not result in a substantial contribution to cumulative traffic impacts.

Impact 3.11-3: Traffic congestion and delays resulting from construction activities and lane closures. The Project would implement a construction traffic control plan that would minimize traffic delays associated with construction activities within or adjacent to traveled roadways. This Project impact is considered less than significant although minor delays and detours could be required. These minor delays could combine with other traffic delays in the Project area that occur as a result of traffic congestion or other adjacent roadway construction projects that could occur concurrently with Project construction activities. The resulting combined delays would be a cumulative impact. However, any delays resulting from Project construction activities would be temporary and of limited duration and would not be expected to result in a considerable contribution to cumulative traffic circulation impacts.

Impact 3.11-4: Potential effects on bicycle and pedestrian circulation. Provisions for bicycle and pedestrian circulation during construction are required pursuant to the construction contract special as described in Chapter 2. With these provisions, this Project impact is considered less than significant although minor delays and detours for bicycle and pedestrian routes could be required during construction. These minor delays could combine with other delays to bicycle and/or pedestrian movement in the Project area that occur as a result of other adjacent roadway construction projects that may occur concurrently with Project construction activities. The resulting combined delays would be a cumulative impact. However, any delays resulting from Project construction activities would be temporary and of limited duration and would not be expected to result in a considerable contribution to cumulative bicycle and pedestrian circulation impacts.

Following construction, the Project would provide improved bicycle and pedestrian access and circulation through the connectivity provided with Class II bicycle lanes and sidewalks.

Impact 3.11-5: Potential effects on transit system operations. Project construction would have the same potential for cumulative traffic delay impacts as those discussed above and would not be expected to result in a cumulatively considerable impact to traffic circulation. Following construction, the Project would result in improved circulation and access and additional transit routing options would be available and no adverse cumulative impact to transit systems would occur.

4.2.12 Summary of Significant Cumulative Impacts

Based on the preceding analysis, none of the Project-specific impacts identified in Chapter 3 would result in a substantial contribution to cumulative impacts.

4.3 Significant Irreversible Environmental Changes

Section 15126(c) of CEQA guidelines requires that an EIR discuss significant irreversible environmental changes that will be caused by a project. Project construction would commit fossil fuels and other nonrenewable or slowly renewable resources through the operation of vehicles and equipment for site grading and construction activities. Other resources including materials, such as wood products, metals, cement, asphalt and other products, would be used or consumed during Project construction or would be effectively permanently committed as Project materials. Some of these materials could ultimately be available for recycling; however, for the

purposes of environmental impact considerations, much of the materials used for construction would be irreversibly committed. Impacts identified in Chapter 3 would result in effectively irreversible changes as a result of ground disturbance and the removal of existing resources within the Project site. These impacts include loss of wetlands and drainages, oak woodlands, and other habitats. These impacts would be mitigated through mitigation measures described in Section 3.4.5, and this Draft SEIR sufficiently discloses the impacts associated with the loss of such resources.

4.4 Growth-Inducing Effects

Section 15126(d) of the CEQA Guidelines requires that an EIR discuss the ways in which a project could foster economic or population growth in the surrounding environment.

The Project would provide increased and improved access to properties within and adjacent to the Project study area. Because the Project would fulfill a condition of approval for development of the Silver Springs subdivision project Phases 2 and 3, the Project would remove a barrier to development of that approved project. In addition, it is possible that the improved circulation and access resulting from the proposed Project could foster some degree of additional development within the region.

As a result of the improved access and circulation that would be provided by the Project, the Project would contribute to the potential for residential/population and commercial growth consistent with existing land use and zoning designations (see discussion below regarding CEQA review conducted for the General Plan land use designations of these areas). Pursuant to CEQA Guidelines Section 15126(d), "it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." For this analysis, development of other projects for which construction of the Project could remove at least one barrier (i.e., access) is assumed to create the potential for adverse environmental effects associated with construction activities (e.g., land clearing and grading, habitat conversion, air pollutant emissions, noise) as well as environmental effects associated with the permanent presence of these developed uses (including increased traffic, air pollutant emissions, noise, visual and lighting effects, permanent habitat loss, stormwater runoff, and water quality effects).

The Project is consistent with, and is identified in, the 2004 County General Plan. Therefore, the CEQA review conducted for the County General Plan included consideration of these potential future uses and the general environmental impacts that could occur as a result of future development that could use the Silver Springs Parkway. Development of these adjacent areas either has been subject to project-specific CEQA review (as with the Silver Springs residential development project) or would be subject to project-specific CEQA review when specific development proposals are submitted to the County.

CHAPTER 5
ALTERNATIVES

CHAPTER 5—ALTERNATIVES

5.1 Introduction

The California Environmental Quality Act (CEQA) Guidelines require that an environmental impact report (EIR) "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6[a]). The CEQA Guidelines also state that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (CEQA Guidelines Section 15126.6[b]).

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained while reducing the magnitude of, or avoiding, the environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the California Public Resources Code and the CEQA Guidelines direct that the EIR need "set forth only those alternatives necessary to permit a reasoned choice." The CEQA Guidelines provide definition for "a range of reasonable alternatives" and, thus limit the number and type of alternatives that must be evaluated in a given EIR.

This Draft Subsequent EIR (Draft SEIR) incorporates and summarizes relevant analysis and information from the previously certified 1992 Bass Lake Road Realignment EIR and a 2001 addendum. This Draft SEIR also includes updated and additional analysis to provide complete and comprehensive documentation of the Project's environmental impacts and other information required for CEQA compliance.

Environmental review of the construction of the Silver Springs Parkway along the proposed alignment has been previously conducted and alternatives were considered as part of those previous environmental reviews, as summarized in Section 5.2, below. This chapter then provides a description of the alternatives development process conducted for this Draft SEIR, describes the alternatives evaluated herein, describes the impacts of Project alternatives compared to Project impacts, and concludes with a discussion of the environmentally superior alternative based on the analysis presented in this chapter.

5.2 Previous Alternatives Analyses

The 1992 Bass Lake Road Realignment EIR documented the County's decision to select an alternative to the alignment that had been previously selected by the County in a 1986 Bass Lake Road Realignment Study. The 1986 Bass Lake Road Realignment Study (included in Appendix C of the 1992 Bass Lake Road Realignment EIR) considered several corridor/routing options for a new connection between Bass Lake Road and Green Valley Road.

In evaluating different alignments for Bass Lake Road in 1986, the County considered placing the road through the parcels of land in the Green Springs Subdivision basically following the alignment of Deer Valley Road. According to the alignment study (included in Appendix C of the 1992 Bass Lake Road Realignment EIR), that alignment was the longest of any segments considered and would have been the most costly to construct. According to the alignment study, that alignment would also have had serious environmental implications and five houses were located within the setback for the right-of-way. In general, the location of that alignment was found to have the potential to result in greater land use compatibility impacts than the selected alignment because it would cross an existing rural subdivision whose residents value the rural character of the area. Additionally, according to the study, the alignment would not meet design criteria due to steep grades. The alignment would have resulted in elimination of oak trees, fragmentation and disturbance of wildlife habitat, and effects on wetlands including drainage swales and an intermittent creek.

An alignment was selected as a result of the 1986 study that is similar to the current alignment within the Project segment (south portion) of the Silver Springs Parkway alignment. (The 1986 alignment varied from the current Silver Springs Parkway alignment in the northern portion, and was located farther to the east than the recently constructed northern segment.)

The 1992 EIR considered the "no-project alternative" as the County proceeding with development of the previously adopted alignment for the Bass Lake Road realignment, as opposed to not constructing the realignment. Table 3-C of the 1992 Bass Lake Road Realignment Draft EIR documented a comparison of environmental effects associated with the 1986 alignment and the realignment as proposed in 1992. The 1992 alignment was identified as having similar environmental effects as the 1986 alignment. However, the 1992 alignment was identified as having a reduced impact on oak tree loss (removal of approximately 391 oak trees as a result of constructing the 1992 alignment compared to removal of approximately 574 oak trees as a result of constructing the 1986 alignment) and an increase in the amount of wetlands fill (fill of approximately 2.09 acres of wetlands as a result of constructing the 1992 alignment compared to fill of approximately 1.68 acres of wetlands as a result of constructing the 1986 alignment). The 1992 alignment was also determined to be superior to the adopted alignment, since it would allow a better roadway profile grade, less grading would be required which would reduce scarring of the topography, and better sight distance at the intersection of Green Valley Road.

As discussed, the County conducted environmental review of the proposed realignment in 1992 and the current Project design is consistent with the design that was subject to that previous environmental review and was selected by the County decision makers.

5.3 Alternatives Considered for this Draft SEIR

For the purposes of this Draft SEIR, it is recognized that environmental review of the construction of the Silver Springs Parkway along the proposed alignment has been previously conducted and consideration of alternatives was undertaken as part of those previous environmental reviews, as summarized in Section 5.2, above. Therefore, and given the Project objectives discussed in Chapter 2, the scope of the alternatives analysis considered in this Draft SEIR does not extend to consideration of alternative alignments for the Project segment of Silver

Springs Parkway. Instead, the consideration of alternatives is appropriately limited to modifications that could be made to the Project that would reduce significant impacts identified while still achieving the overall Project objective of constructing the Project along the previously approved alignment. Importantly, the northern segment of Silver Springs Parkway has been constructed. The alignment of that constructed segment is based on the alignment adopted in 1992 and the design is predicated on the ultimate construction of the remaining southern segment along the previously adopted alignment. Thus, an important consideration for the current Project (construction of the southern segment) is to provide a direct connection between Bass Lake Road and the southern terminus of the completed northern segment and alternative alignments deviating substantially from the previously approved alignment do not represent feasible alternatives to the Project.

The analysis presented in Chapters 3 and 4 concludes that the Project would not result in any Project-specific or cumulative significant and unavoidable impacts. Thus, identification of alternatives that would avoid or reduce significant and unavoidable impacts is not relevant here.

Comments were received during scoping conducted for this Draft SEIR that provided recommendations for Project alternatives, or design options, for consideration by the County. A summary of those pertaining to Project design and the reasons for their evaluation as viable Project alternatives or their disposition as alternatives that do not warrant further consideration in this Draft SEIR are provided. Note that these recommendations are found to not warrant further consideration in the Draft SEIR beyond that presented here because the County has determined that they are not necessary to avoid or reduce a significant impact. However, that does not preclude County decision makers from considering recommended design elements into the Project to the extent that decision makers decide the recommendations have merit, are feasible, and would not preclude achievement of the Project objectives.

Landscaping: One or more commenters recommended that landscaping be included as an element of the Project. Although the Project as proposed does not include landscaping, mitigation is identified in this Draft SEIR that requires the installation of landscaping within 3 years of Project construction. The inclusion of the mitigation requirement is considered sufficient for addressing Project visual impacts and a separate alternative with a landscaping component is not warranted.

Self-Enforcing Roads: One or more commenters suggested that "self-enforcing" road design be incorporated to the Project to help control vehicle speeds requiring less law enforcement. Such design recommendations included consideration of a roundabout, speed bumps, and/or narrower lanes. The Project would be designed in accordance with County road design standards and the County does not have a program or policies directing the design of roads as self-enforcing. Further, the analysis in this Draft SEIR does not identify excessive speeds associated with the Project as an environmental effect and, thus, an alternative directed toward controlling vehicle speeds is not needed to address an environmental effect.

Roundabout Intersection: One or more commenters suggested that the County consider installation of a roundabout for the Bass Lake Road / Silver Springs Parkway intersection. The traffic analysis indicates that the Project design intersection is sufficient

for achieving levels of service under existing and future with-Project conditions. The roundabout design would not avoid or reduce significant effects identified in this Draft SEIR and could result in additional ground disturbance and associated environmental effects as compared to the Project as proposed.

Westward Shift of Bass Lake Road: One or more commenters suggested that the alignment of Bass Lake Road south of the proposed Silver Springs Parkway/Bass Lake Road intersection be shifted to the west of the existing alignment to accommodate future intersection and turn-lane options. The traffic study conducted for the Project did not identify a need for future turn lanes or potential future constraints associated with the proposed alignment. Commenters also suggested that a westward shift would reduce traffic noise from Bass Lake Road at existing residences to the east. However, the noise analysis as presented in Section 3.10 does not identify significant impacts associated with traffic noise at these residents. For these reasons, a westward shift of the Bass Lake Road segment of the Project is not warranted. It should also be noted that the Project would construct the new segment of Silver Springs Parkway along a previously identified, evaluated, and approved alignment. Diverging from that previously approved alignment would not achieve an important component of the Project objectives.

Bus Turnouts: One or more commenters suggested that the County consider installation of bus turnouts along Bass Lake Road and the new Silver Springs Parkway. The analysis conducted for the Draft SEIR did not identify an adverse impact associated with an absence of bus turnouts along the Project segment of Silver Springs Parkway, thus, including turnouts as a component of design is not warranted to address a significant environmental effect.

As discussed above, the Project would not result in significant and unavoidable impacts warranting consideration of Project alternatives that would reduce such impacts and none of the alternatives/design options recommended during scoping are considered necessary to address environmental effects.

Therefore, the alternatives analysis in Section 5.4 provides a comparison of the proposed Project and the No-Project Alternative, as required by CEQA.

5.4 No-Project Alternative

CEQA requires that the "no project" alternative be evaluated in an EIR. For this Draft SEIR, the No-Project Alternative is a scenario in which the County would not proceed with the additional discretionary decisions needed to acquire rights-of-way and construct the southern segment of the previously approved Silver Springs Parkway.

The No-Project Alternative does not attain the Project objectives of completing Silver Springs Parkway as identified in the County General Plan (El Dorado County 2004) and the No-Project Alternative would also fail to obtain the specific objectives presented in Chapter 2.

Under the No-Project Alternative, the adverse Project-specific and cumulative impacts identified in Chapters 3 and 4 of this Draft SEIR would not occur. It should be noted that Project

environmental benefits (some of which are identified as less-than-significant impacts) associated with the analysis in Chapter 3 of this Draft SEIR would not be realized under the No-Project Alternative. These include:

- reduced long-term air pollutant and GHG emissions associated with reduced vehicle miles traveled and
- reduced traffic noise levels along the existing Bass Lake Road alignment northeast of the proposed Silver Springs Parkway/Bass Lake Road intersection.

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CHAPTER 6
REFERENCES

CHAPTER 6—REFERENCES

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CHAPTER 7
LIST OF PREPARERS

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El Dorado County, Transportation

Janet Postlewait	Project Planner
Monika Pedigo	Associate Civil Engineer
Chandra Ghimire, P.E.	Project Manager

Benchmark Resources

Environmental Impact Report Preparation and Management

Dave Brown	Principal-in-Charge
Bob Delp	Project Manager and Analyst
Christy Seifert	Editor
Katharina McKillip	Document Production

KD Anderson & Associates, Inc.

Air Quality

Wayne Shijo, P.E.	Modeler/Analyst

Foothill Associates

Biological Resources

Meredith Branstad	Principal Biologist/Analyst

Bollard Acoustical Consultants, Inc.

Noise

Paul Bollard	Principal Acoustician/Analyst

EMKO Environmental

Hydrology and Water Quality

Dr. Andrew Kopania, R.G., C.H. Principal Hydrologist/Analyst

Fehr and Peers

Traffic

David Robinson P.E.	Engineer/Analyst

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