



El Dorado County Broadband Fiber Project

Public Review Draft
Environmental Impact Report

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ACRONYMS AND ABBREVIATIONS

AAM	annual arithmetic mean
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADL	Aerially deposited lead
ADU	Accessory Dwelling Unit
AEU	Amador-El Dorado Unit
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
Amsl	above mean sea level
AST	Aboveground storage tanks
AR4	Fourth Assessment Report
AR5	Fifth Assessment Report
BLM	Bureau of Land Management
BMP	Best Management Practices
BRA	Biological Resources Assessment
BSL	Broadband Service Locations
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
Cal ARP	California Accidental Release Prevention
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Policy Act
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CALVEG	Classification and Assessment with LANDSAT of Visible Ecology Groupings
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDC	California Department of Conservation
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
CESQ	Conditionally Exempt Small Quantity Generator
CETF	California Emerging Technology Fund

ACRONYMS AND ABBREVIATIONS (cont.)

CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	methane
CHP	California Highway Patrol
CHWMP	El Dorado County Hazardous Waste Management Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO ₂ e	carbon dioxide equivalents
Compact	Tahoe Regional Planning Compact
County	El Dorado County
CPCSD	Cameron Park Community Service District
CPFD	Cameron Park Fire Protection District
CRHR	California Register for Historic Resources
CRPR	California Rare Plant Rank
CSD	community service district
CTC	California Transportation Commission
CTP	California Transportation Plan
CUPA	Certified Unified Program Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
CWHP	California Wildfire Mitigation Program
CWHR	California Wildlife Habitat Relationships System
CWPP	Community Wildfire Protection Plan
dB	decibels
dBA	A-weighting decibels
DHS	California Department of Health Services
DMV	California Department of Motor Vehicles
DOC	Department of Conservation
DOT	Department of Transportation
DPM	diesel particulate matter
DSL	digital subscriber line
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
ECA	Essential Connectivity Areas
EDCAQMD	El Dorado County Air Quality Management District
EDCFPD	El Dorado County Fire Protection District
EDCTC	El Dorado County Transportation Commission
EDHCSD	El Dorado Hills Community Service District
EDHFD	El Dorado Hills Fire Department
EDSO	El Dorado County Sheriff's Office

ACRONYMS AND ABBREVIATIONS (cont.)

EDWA	El Dorado Water Agency
EFH	Essential Fish Habitat
EID	El Dorado Irrigation District
EIR	Environmental Impact Report
EMD	Environmental Management Department
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESA	Endangered Species Act
ESA	Environmental Site Assessment
Eveg	Existing Vegetation
FCC	Federal Communications Commission
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Act
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FLFD	Fallen Leaf Fire Department
FLPMA	Federal Land Policy and Management Act
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FRA	Federal Responsibility Area
GDPUD	Georgetown Divide Public Utility District
GDRD	Georgetown Divide Recreation District
GFCSD	Grizzly Flats Community Services District
GFPD	Garden Valley Fire Protection District
GHG	Greenhouse Gas
GVFPD	Garden Valley Fire Protection District
GSP	Groundwater Sustainability Plans
GWP	Global Warming Period
H ₂ S	hydrogen sulfide
HCD	California Department of Housing and Community Development
HCP/NCCP	Habitat Conservation Plan / Natural Community Conservation Plan
HFC	hydrofluorocarbons
HMBP	Hazardous Materials Business Plan
IBC	International Building Code
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan

ACRONYMS AND ABBREVIATIONS (cont.)

ISP	Internet Service Provider
JADU	Junior Accessory Dwelling Unit
L&RMP	Eldorado Forest Land and Resource Management Plan
LATA	Local Agency Technical Assistance
LBP	Lead-based paint
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
LESA	Land Evaluation and Assessment
LEOP	Local Emergency Operations Plan
LHMP	Local Hazard Mitigation Plan
LOS	level of service
LQG	Large Quantity Generator
LRA	Local Responsibility Areas
LTAB	Lake Tahoe Air Basin
LTSCP	Lake Tahoe Sustainable Communities Program
LUST	Leaking Underground Storage Tanks
LVFPD	Lake Valley Fire Protection District
Mbps	megabits per second
MBFPD	Meeks Bay Fire Protection District
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MND	Mitigated Negative Declaration
mPa	micro-Pascals
MPO	metropolitan planning organizations
MPZ	Mineral Preserve
MRF	material recovery site
MRZ	Mineral Resource Zone
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MS4	Municipal Separate Storm Water Sewer Systems
MW	megawatts
MwH	megawatt hours
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act

ACRONYMS AND ABBREVIATIONS (cont.)

NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NHT	National Historic Trail
NHTSA	National Highway Traffic Safety Administration
NIMS	National Incident Management System
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen Dioxide
NOA	Notice of Availability
NOA	Naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Completion
NOD	Notice of Determination
NWSRS	National Wild and Scenic Rivers System
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NSLU	Noise sensitive land uses
O ₃	Ozone
OES	Office of Emergency Services
OHP	Office of Historic Preservation
ONWR	Outstanding National Resource Water
OPR	Office of Planning and Research
ORMP	El Dorado County Oak Resources Management Plan
OSHA	Occupational Safety and Health
OWPR	Office of Wildfire Preparedness and Resilience
OWTS	onsite wastewater treatment systems
Pb	Lead
PCWA	Placer County Water Authority
PFC	perfluorocarbons
PFPD	Pioneer Fire Protection District
PG&E	Pacific Gas and Electric
PM	post miles
PM	Particulate Matter
PM ₁₀	Coarse PM, 10 micrometers or less in diameter
PM _{2.5}	Fine PM, 2.5 micrometers or less in diameter
PPD	pounds per day
Ppm	parts per million
PPV	peak particle velocity

ACRONYMS AND ABBREVIATIONS (cont.)

PRC	Public Resources Code
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RF	Radiofrequency
RFPD	Rescue Fire Protection District
RHNA	Regional Housing Needs Allocation
RMP	Risk Management Plans
ROG	reactive organic compounds
ROW	Right-of-way
RPS	Renewables Portfolio Standard
RTP	regional transportation plan
RTPA	regional transportation planning agency
RWQCB	Regional Water Quality Control Board
SAR	Second Assessment Report
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCS	Sustainable Communities Strategy
SEMS	Standardized Emergency Management System
SEZ	Stream environment zone
SF ₆	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plans
SLCP	short-lived climate pollutants
SLTFS	South Lake Tahoe Fire Rescue
SLTPD	South Lake Tahoe Police Department
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act of 1975
SMUD	Sacramento Municipal Utilities District
SFNA	Sacramento Federal Nonattainment Area
SNFPA	Sierra Nevada Forest Plan Amendment
SO ₂	Sulfur Dioxide
SOI	Sphere of Influence
SPL	sound pressure level
SQG	Small Quantity Generator
SQIP	Scenic Quality Improvement Program
SR	State Route
SRA	State Responsibility Areas
SSC	Species of Special Concern
STPUD	South Tahoe Public Utilities District
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Program

ACRONYMS AND ABBREVIATIONS (cont.)

SWRP	Stormwater Resource Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCP	Traditional Cultural Property
TCR	Tribal Cultural Resource
TIMF	Traffic Impact Mitigation Fee
TMDL	Total Maximum Daily Load
TPZ	Timberland Production Zone
TRPA	Tahoe Regional Planning Agency
UNFCCC	United Nations Framework Convention on Climate Change
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USEPA	United States Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicles miles traveled
VOC	volatile organic compounds
WEAP	Worker Environmental Awareness Program
WRDMP	Water Resource Development and Management Plan
WQC	Water Quality Certification
WQP	Water Quality Plan
WUI	Wildland-Urban Interface
WWTP	wastewater treatment plant

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This summary presents an overview of the proposed El Dorado County Broadband Fiber Project, herein referred to as “Project” or “proposed Project”. This section also summarizes the alternatives to the proposed Project, identifies issues to be resolved, areas of controversy, and conclusions of the analysis contained in Sections 4.1 through 4.20 of this Environmental Impact Report (EIR). For a complete description of the proposed Project, please see Chapter 3.0, Project Description, of this EIR. For a discussion of Project Alternatives, please see Chapter 5.0, Project Alternatives.

This EIR addresses the environmental effects associated with the Project. The California Environmental Quality Act (CEQA) requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental impacts of such projects. An EIR is a public document designed to provide the public, local, and State governmental agency decision-makers with an analysis of a project’s potential environmental impacts to support informed decision-making.

This EIR has been prepared pursuant to the requirements of CEQA and the CEQA Guidelines to determine if project approval could have a significant impact on the environment. El Dorado County (County), as the Lead Agency, has reviewed and revised as necessary, submitted drafts, technical studies, and reports to reflect its own independent judgment, including reliance on applicable County technical personnel and review of all technical reports. Information for this EIR was obtained from on-site field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data, and similar literature in the public domain; and specialized environmental assessments (e.g., air quality, biological resources, greenhouse gas emissions).

ES.2 ENVIRONMENTAL PROCEDURES

This EIR has been prepared to assess the environmental effects associated with implementation of the proposed Project, as well as anticipated future discretionary actions and approvals. The main objectives of this document as established by CEQA Section 15002(a) are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An EIR is the most comprehensive form of environmental documentation identified in the CEQA statute and in the CEQA Guidelines. It provides the information needed to assess the environmental consequences of a proposed project, to the extent feasible. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts. An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Prior to approving a proposed project, the lead agency must consider the information contained in the EIR, determine whether the EIR was properly prepared in accordance with the CEQA Guidelines, determine that it reflects the independent judgment of the lead agency, adopt findings concerning the project's significant environmental impacts, if any, and alternatives, and adopt a Statement of Overriding Considerations if the proposed project would result in significant impacts that cannot be avoided.

ES.3 EIR FORMAT

This EIR is organized into the following chapters:

- **Executive Summary:** Consistent with Section 15123 of the CEQA Guidelines, this chapter provides a brief summary of the proposed Project and identifies environmental impacts and mitigation measures in a summary matrix.
- **Chapter 1.0 – Introduction:** This chapter presents an overview of the Project background and describes the intended use of the EIR (CEQA Guidelines Section 15124(d)), as well as the environmental review process.
- **Chapter 2.0 – Project Setting and Location:** This chapter includes a description of the physical environmental conditions in the vicinity of the Project site as they existed at the time the Notice of Preparation (NOP) was published, and which have been updated based on current conditions during preparation of this EIR, consistent with Section 15125 of the CEQA Guidelines.
- **Chapter 3.0 – Project Description:** This chapter provides a detailed description of the proposed Project characteristics and objectives as well as the required discretionary approvals consistent with Section 15124 of the CEQA Guidelines.
- **Chapter 4.0 – Environmental Impact Analysis:** This chapter contains a comprehensive analysis of the potential impacts to each environmental factor evaluated in this EIR, feasible measures that could minimize or mitigate those impacts consistent with Section 15126.4 of the CEQA Guidelines, and cumulative impacts resulting from the combination of the proposed Project together with other County plans causing related impacts consistent with Section 15130 of the CEQA Guidelines.
- **Chapter 5.0 – Project Alternatives:** Consistent with Section 15126.6 of the CEQA Guidelines, this chapter evaluates a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project. Alternatives other than the proposed Project evaluated in this document include: (1) No Project Alternative; (2) Aerial

Installation Only Alternative; (3) Underground Installation Only Alternative; and, (4) Use of Existing Infrastructure Alternative.

- **Chapter 6.0 – Significant Irreversible Environmental Changes:** Consistent with Section 15126.2(d) of the CEQA Guidelines, this chapter outlines the significant irreversible changes anticipated to occur as a result of the proposed Project.
- **Chapter 7.0 – Growth Inducement:** Consistent with Section 15126.2(e) of the CEQA Guidelines, this chapter describes potential growth-inducing impacts associated with the proposed Project.
- **Chapter 8.0 – Significant and Unavoidable Impacts:** Consistent with Section 15126.2(c) of the CEQA Guidelines, this chapter describes any significant impacts identified, including those which can be mitigated but not reduced to a level of insignificance.
- **Chapter 9.0 – List of Preparers:** This chapter lists all authors and agencies that assisted in the preparation of the report by name, title, and company or agency affiliation.

ES.4 TYPE AND PURPOSE OF THIS EIR

This EIR has been prepared to meet the requirements of a program EIR as defined in CEQA Guidelines Section 15168(c) for streamlining later activities. In accordance with Section 15168 of the CEQA Guidelines, a program EIR may be prepared on a series of actions that can be characterized as one large project and are related to, among other things, the issuance of general criteria to govern the conduct of a continuing program or individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways. The proposed Project meets these criteria for the use of a program EIR.

This EIR assesses potential environmental consequences of implementing the proposed Project and identifies mitigation measures and alternatives to the proposed Project that would avoid or reduce significant impacts where necessary. This EIR is intended to inform County decision makers, other responsible agencies, and the general public as to the nature of the proposed Project's potential environmental impacts.

ES.5 PROJECT LOCATION

The proposed Project is located within the unincorporated areas of the County and within the two incorporated cities of the County, the cities of Placerville and the City of South Lake Tahoe. The majority of future fiber optic broadband infrastructure would be constructed within typical roadway cross-section within the County, cities, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). However, broadband infrastructure could also be constructed on private disturbed land and federal land and could connect to existing conduit or utility poles located within public or private utility easements. The exact alignment of future broadband infrastructure is currently unknown at this time and would be planned based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources.

ES.6 PROJECT SUMMARY

The County is proposing to expand access to fiber optic broadband technology throughout the unincorporated areas and incorporated cities within the County. The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. It is anticipated that the depth of excavation for buried conduits would be 5 feet. Additionally, the maximum height of utility poles would be 100 feet. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, the incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. However, broadband infrastructure could also be constructed on private disturbed land and federal land. The exact alignment of future broadband infrastructure is currently unknown at this time and would be planned based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources.

Underground fiber optic conduit or aboveground utility poles would typically be located in previously disturbed and/or developed areas (e.g., in ROW). Many of these fiber optic conduits or utility poles would generally follow the route of the roadway, particularly if the applicable areas have other issues that could affect access, such as vegetation, geologic, landscape, and/or water features that should not be disturbed. The fiber optic infrastructure could follow other utility installations; therefore, it is likely that the ground along these alignments has been previously disturbed by prior utility work. This EIR conservatively assumes that new ground disturbance would be required for the entire Project; however, there would be potential for utilizing existing conduit or utility poles where only installation of fiber optic lines would be required. If deemed feasible, the new broadband infrastructure constructed under the proposed Project would connect to existing broadband infrastructure (e.g., aboveground, and belowground) in the County supported by existing ISPs.

Per Section 15124 of the CEQA Guidelines, the County identified the following objectives for the proposed Project:

- Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;
- Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;
- Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;
- Streamline the environmental review process for individual fiber projects that are implemented in the County;
- Identify known environmental and cultural assets to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,
- Save time and money for both El Dorado County and individual fiber project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review individual fiber projects and avoiding duplication of applicant costs.

ES.7 SUMMARY OF ALTERNATIVES TO THE PROJECT

ES.7.1 No Project Alternative

The No Project Alternative is required under Section 15126.6(e) of the CEQA Guidelines and represents a possible scenario that could occur if the proposed project is not approved. According to Section 15126.6(e)(3)(B) of the CEQA Guidelines, if the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Under the No Project Alternative, no actions would be taken to expand broadband availability in El Dorado County and the service area would remain unchanged from current conditions. As such, the No Project Alternative would not meet the Project objectives. However, as required by CEQA, the No Project Alternative is evaluated in this program EIR. Under the No Project Alternative, there would be no discretionary action by El Dorado County, and thus no impact. However, for purposes of comparison with the other action alternatives, conclusions for each technical area are characterized as “impacts” that are greater, similar, or less, to describe conditions that are worse than, similar to, or better than those of the proposed Project.

ES.7.2 Aerial Installation Only Alternative

The Aerial Installation Only Alternative would include only individual fiber projects that install aboveground fiber optic line that would utilize new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. This alternative was considered because it would avoid or reduce potential impacts that would be associated with underground installation of new fiber optic line or new conduit, such as construction impacts associated with horizontal directional drilling, plowing, trenching, micro trenching, line installation, and pavement repair. Some areas of the County are known to contain naturally occurring asbestos (NOA) and aerially deposited lead (ADL); the minimized ground disturbance under aerial installation methods would reduce the potential risk of exposure to hazardous materials. The aerial installation of fiber optic line would also be more feasible for long distance connections, such as in rural areas of the County.

However, the addition of new utility poles may not be feasible in some locations in the County due to the existing terrain and rocky subsurface conditions that would make it nearly impossible to reach the boring depth required for utility poles, which would leave service gaps in those locations. Further, aerial installation may not be feasible in some densely forested and mountainous areas of the County, which may prevent the aerial stringing of fiber optic line or the installation of new utility poles. Aerial fiber optic line also typically requires more frequent maintenance, as compared to underground fiber optic line or conduit. Additionally, this alternative may result in increased impacts to aesthetics and visual resources associated with the construction of new utility poles within the viewshed of scenic vistas or U.S. Highway (U.S.) 50, State Route (SR) 89, and SR 88, portions of which are designated State Scenic Highways within the County.

ES.7.3 Underground Installation Only Alternative

The Underground Installation Only Alternative would include individual fiber projects that would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line or new utility poles would be installed under this alternative. This alternative was considered because it would avoid or reduce potential impacts that would be associated

with aboveground installation of fiber optic line, including impacts to aesthetics and visual resources associated with the construction of new utility poles within the viewsheds of scenic vistas or U.S. 50, SR 89, and SR 88, portions of which are designated State Scenic Highways within the County. Additionally, this alternative would be more feasible in certain areas of the County, such as densely forested or mountainous areas that would prevent the aerial stringing of fiber optic line or the installation of new utility poles. Lastly, the underground installation of fiber optic line typically requires less frequent maintenance due to fewer disturbances as compared to aerial fiber optic line.

However, the installation of underground fiber optic lines typically requires more ground disturbance and longer construction periods as compared to aerial installation. Increased construction-related impacts could occur due to the increased ground disturbance required for installation, including horizontal directional drilling, plowing, trenching, micro trenching, and line installation. Under this alternative, underground fiber optic lines could be constructed in areas that have existing buried utilities that could contain hazardous waste. Additionally, some areas of the County are known to contain NOA and ADL; the increased ground disturbance resulting from underground installation methods may increase the risk of exposure to hazardous materials. Depending on the prevailing terrain and geological conditions, including bedrock near the surface, it may not be feasible to install underground infrastructure in some parts of the County.

ES.7.4 Use of Existing Infrastructure Alternative

The Use of Existing Infrastructure Alternative would include individual fiber projects that install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, no new utility poles or underground conduit would be installed. This alternative was considered because it would avoid or reduce most impacts associated with the proposed Project, as outlined in the program EIR, as fewer individual fiber projects would be implemented, and therefore less construction and ground disturbance. This alternative would avoid impacts to aesthetic and visual resources, because the stringing of aerial fiber optic line would occur along existing utility poles, which would not introduce new vertical features within the viewshed of scenic vistas or State Scenic Highways in the County. However, this alternative would not meet the basic Project objectives associated with providing a reliable system of broadband communications in El Dorado County, because it would not provide for the expansion of broadband infrastructure into portions of the service area that do not already include sufficient conduit, utility poles, and supporting infrastructure.

ES.8 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR Identify issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed Project, the major issues to be resolved include decisions by El Dorado County, as Lead Agency, related to:

- Whether this Draft EIR adequately describes the environmental impacts of the proposed Project.
- Whether the Project is compatible with the character of the existing area.
- Whether the identified mitigation measures should be adopted or modified.

- Whether there are other mitigation measures that should be applied to the proposed Project besides those identified in the Draft EIR.
- Whether there are any alternatives to the proposed Project that would substantially lessen any of the significant impacts of the proposed Project and achieve most of the basic objectives.

ES.9 AREAS OF CONTROVERSY

El Dorado County issued a NOP for the Draft EIR on August 26, 2024, and held an in-person public scoping meeting on Wednesday, September 25, 2024, to receive agency and public comments. The scoping period for this EIR started on August 26, 2024, and ended on September 30, 2024, during which time responsible agencies and interested members of the public were invited to submit comments as to the scope and content of the Draft EIR. The comments received focused primarily on tribal cultural resources, transportation, hydrology and water quality. Comments received during the public scoping period are included in Appendix A of this EIR.

To the extent that these issues have environmental impacts and to the extent that analysis is required under CEQA, they are addressed in Sections 4.0 through 9.0 of this EIR.

ES.10 SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant impact on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance.

The proposed Project does not have the potential to generate significant environmental impacts. Table ES-1 summarizes the conclusions of the environmental analysis contained in this EIR and presents a summary of impacts and mitigation measures identified. It is organized to correspond with the environmental issues discussed in Sections 4.1 through 4.20. The table is arranged in four columns: 1) environmental impacts, 2) significance prior to mitigation, 3) mitigation measures, and 4) significance after mitigation. For a complete description of potential impacts, please refer to the specific discussions in Sections 4.1 through 4.20.

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Aesthetics			
AES-1: The proposed project may result in a substantial adverse effect on a scenic vista.	Potentially Significant	<p>Mitigation Measure AES-1: Visual Impact Assessment</p> <p>For any individual fiber project proposed within the designated scenic vista, eligible State Scenic Highway, and/or designated State Scenic Highway, the project applicant shall prepare a Visual Impact Assessment (VIA) for Lead Agency review and approval. The VIA shall be prepared by a qualified professional with experience in visual resource analysis. The VIA shall evaluate the potential impacts of the project on scenic resources in accordance with the California Environmental Quality Act (CEQA) Guidelines, including but not limited to consideration of aesthetic values, visual quality, and the character of the surrounding landscape.</p> <p>The VIA shall include the following components:</p> <ul style="list-style-type: none"> • <u>Baseline Conditions</u>: Documentation of existing visual conditions, including photographs, renderings, and/or other visual tools to establish the project site's current view and its relationship to surrounding scenic resources. • <u>Visual Simulations</u>: Preparation of photo-realistic visual simulations depicting the project as proposed from key public viewpoints, including those within the scenic vista or from the State Scenic Highway. • <u>Impact Analysis</u>: Identification of potential impacts on scenic vistas and resources, using thresholds of significance established under CEQA Guidelines or applicable local policies. 	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
		<ul style="list-style-type: none"> • <u>Design Recommendations or Mitigation Measures:</u> Identification of feasible design measures or project-specific mitigation measures to avoid, minimize, and/or reduce potentially significant visual impacts. These measures may include, but are not limited to: <ul style="list-style-type: none"> ○ Modifications to project design, height, massing, and/or orientation. ○ Use of landscaping, vegetative screening, and/or earthworks to soften visual impacts. ○ Use of non-reflective and/or neutral-colored materials to reduce visual contrast. ○ Adjustment of lighting design to prevent glare and/or light trespass into sensitive areas. 	
AES-2: The proposed project may damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.	Potentially Significant	See Mitigation Measure AES-1	Less than Significant
AES-3: The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings in a non-urbanized area.	Less than Significant	N/A	N/A
AES-4: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less than Significant	N/A	N/A
AES-5: The proposed project would not result in a significant cumulative impact with respect to aesthetics.	Potentially Significant	See Mitigation Measure AES-1	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Agriculture and Forestry Resources			
AG-1: The proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural use.	Less than Significant	N/A	N/A
AG-2: The proposed project would not conflict with existing zoning for agricultural use or with a Williamson Act contract.	Less than Significant	N/A	N/A
AG-3: The proposed project would not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production.	Less than Significant	N/A	N/A
AG-4: The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.	Less than Significant	N/A	N/A
AG-5: The proposed project would not result in changes in the existing environment which, due to their location or nature, would result in conversion of agricultural lands to non-agricultural use or forest land to non-forest land.	Less than Significant	N/A	N/A
AG-6: The proposed project would not result in a cumulative impact with respect to agriculture and forestry resources.	Less than Significant	N/A	N/A
Air Quality			
AQ-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
AQ-2: The proposed project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.	Potentially Significant	<p>Mitigation Measure AQ-1: Prepare a Fugitive Dust Mitigation Plan</p> <p>The applicant of an individual fiber project shall submit a Fugitive Dust Control Plan (FDCP) to the Air Pollution Control Officer of the El Dorado County Air Quality Management District (EDCAQMD) prior to the start of any construction activity for which a grading permit was issued by El Dorado County or incorporated city within El Dorado County. The FDCP shall implement all construction related best management practices (BMPs) included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment. The FDCP shall be prepared in compliance with EDCAQMD Rule 223-1. Construction activities shall not commence until the Air Pollution Control Officer has approved or conditionally approved the Fugitive Dust Control Plan.</p>	Less than Significant
AQ-3: The proposed project may expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	<p>Mitigation Measure AQ-2: Prepare an Asbestos Dust Mitigation Plan</p> <p>If naturally occurring asbestos, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer, then an Asbestos Dust Mitigation Plan shall be prepared and submitted to the Air Pollution Control Officer prior to construction. The Asbestos Dust Mitigation Plan shall be prepared in compliance with El Dorado County Air Quality Management District (EDCAQMD) Rule 223-2. Construction activities shall not commence until the Air Pollution Control Officer has approved or conditionally approved the Asbestos Dust Mitigation Plan. 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 disturbed, then the Air Pollution Control Officer shall provide an exemption from EDCAQMD Rule 223-2.</p>	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
AQ-4: The proposed project would not result in substantial emissions of odors adversely affecting a substantial number of people.	Less than Significant	N/A	N/A
AQ-5: The proposed project would not contribute to a cumulatively considerable impact on regional air quality.	Potentially Significant	See Mitigation Measure AQ-1 and AQ-2.	Less than Significant
Biological Resources			
BIO-1: The proposed project may result in a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially Significant	<p>Mitigation Measure BIO-1: Prepare a Site-Specific Biological Resources Assessment</p> <p>Prior to approval of an individual fiber project, the applicant of an individual fiber project shall retain a qualified biologist to prepare a site-specific biological resources assessment (BRA). The BRA shall consist of a desktop review of relevant biological databases and online resources, a general biological reconnaissance survey, vegetation mapping, aquatic resources assessment, analysis of potential impacts to biological resources, and proposed measures to avoid and/or reduce potential impacts.</p> <p>If it is determined during the biological resources assessment that special-status species have the potential to occur within a project area, then site-specific mitigation measures should be recommended to avoid and/or reduce potential impacts. Potential measures for special-status species may include, but are not limited to, protocol-level surveys, nesting bird surveys, and other focused preconstruction surveys.</p> <p>If it is determined that special-status species are present within or adjacent to the project area, or if the project has potential to impact USFWS designated critical habitat and/or NMFS essential fish habitat, then the project proponent shall coordinate with CDFW and/or USFWS, as necessary, to determine avoidance</p>	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
		and/or mitigation and/or measures to reduce potential impacts to a level that would be less than significant. Depending on site-specific conditions, agency involvement may be triggered through the regulatory permitting process or direct agency consultation.	
<p>BIO-2: The proposed project may result in a substantial adverse effect on a sensitive natural community.</p>	<p>Potentially Significant</p>	<p>Mitigation Measure BIO-2: Jurisdictional Delineation and Regulatory Permitting</p> <p>If it is determined that impacts to jurisdictional waters or other sensitive natural communities cannot be avoided, then the project applicant of an individual fiber project shall apply for any necessary permits from the USACE, CDFW, and the RWQCB (e.g., Section 401/404 permits, CDFW Lake or Streambed Alteration Agreement, etc.). If necessary, a formal delineation of wetlands and “other waters” of the U.S. shall be prepared in accordance with USACE’s Corps of Engineers Wetlands Delineation Manual and appropriate regional supplements to determine the extent of aquatic resources and quantify impacts. Impacts to jurisdictional waters and/or sensitive natural habitat shall be mitigated in accordance with agency requirements.</p> <p>Mitigation Measure BIO-3: Oak Resources Inventory</p> <p>If it is determined during the biological resources assessment that an individual fiber project will result in impacts to oak resources, depending on the location of an individual fiber project, the County, incorporated cities, or TRPA may require mitigation for impacts to oak resources or regulated individual oak trees. Depending on the location of the individual fiber project, the County Community Planning and Building Department, City of Placerville Planning Division, City of South Lake Tahoe Planning Division, and/or TRPA may require an inventory of prematurely</p>	<p>Less than Significant</p>

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
		removed trees or canopy cover to determine the extent of the loss prior to approval of the individual fiber project. The inventory shall be prepared by a resource professional with expertise in oak woodlands ecology who is on the list of qualified consultants maintained by the County Community Planning and Building Department, City of Placerville Planning Division, City of South Lake Tahoe Planning Division, or TRPA. Resource professionals may include botanists, ecologists, wildlife biologists, and foresters.	
BIO-3: The proposed project may result in a substantial adverse effect on State or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) or other waters of the U.S. and State through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	See Mitigation Measure BIO-2	Less than Significant
BIO-4: The proposed project may interfere with the movement of native resident wildlife species or with established native resident or migratory wildlife corridors.	Potentially significant	See Mitigation Measure BIO-1	Less than Significant
BIO-5: The proposed project may conflict with local policies or ordinances protecting biological resources.	Potentially Significant	See Mitigation Measure BIO-1 and Mitigation Measure BIO-3	Less than Significant
BIO-6: The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	No Impact	N/A	N/A
BIO-7: The proposed project may result in a significant cumulative impact with respect to biological resources.	Potentially Significant	See Mitigation Measure BIO-1, Mitigation Measure BIO-2, and Mitigation Measure BIO-3	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Cultural Resource			
CUL-1: The proposed project would not cause a substantial change in the significance of a historical resource pursuant to Section 15064.5.	Less than Significant	N/A	N/A
CUL-2: The proposed project may cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	Potentially Significant	<p>Mitigation Measure CUL-1: Archaeological Cultural Resources Investigations</p> <p><i>Preconstruction Screening Identification</i></p> <p>Prior to each phase of individual fiber projects, including installation and/or use of appurtenant structures, unpaved staging areas, and fiber optic line, El Dorado County shall request a records search for all project footprints for construction activities that require ground disturbance in areas that have not been previously subject to such disturbance. For those areas of native, unpaved soil that have not been adequately surveyed for archaeological cultural resources in the past, the County shall require a pedestrian field survey by a qualified professional archaeologist. If archaeological cultural resources are identified as a result of that survey, the County shall implement the recommendations of the consulting archaeologist to avoid or substantially reduce the severity of impacts on such resources. For those areas that have been surveyed previously, the County shall abide by the recommendations of the professional archaeologist who conducted the original survey.</p>	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
		<p>Known Resource Conflicts</p> <p>In the event that the records search described above identifies archaeological cultural resources that would be subject to a project-related impact, the County shall evaluate the status of the resource under CEQA. The archaeological resource shall be assessed for significance through the implementation of a Phase II investigation by a qualified archaeologist. This may require some or all of the following:</p> <ul style="list-style-type: none"><li>• Development of a research design that guides assessments of site significance and scientific potential.<li>• Mapping and systematic collection of a representative sample of surface artifacts.<li>• Subsurface investigation through shovel test pits, surface scrapes, or 1-by-1 meter excavation units; a combination of such methods; or equivalent methods.<li>• Analysis of recovered material to determine significance pursuant to the CEQA Guidelines.<li>• Preparation of a report, including an evaluation of site significance, and recommendations for mitigation, if appropriate.<li>• Appropriate curation of collected artifacts.	

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
		<p>If the resource is precontact in nature, the Phase II investigation shall be coordinated with descendant tribal communities. If the Phase II evaluation concludes that the archaeological resource does not qualify as a historical resource (PRC Section 21084.1) or unique archaeological resource (PRC Section 21083.2), then no further study or protection of the resource is necessary. If the resource does qualify as a historical or unique archaeological resource, then the County shall require the implementation of the Phase III approach described below.</p> <p>A Phase III data recovery effort, in accordance with CEQA Guidelines, shall be implemented by the consulting archaeologist for those sites that are shown by the Phase II efforts to qualify as significant under CEQA. The County shall ensure that data recovery conducted to the level that reduces impacts to below the level of significance has been completed prior to individual fiber project implementation. The Phase III data recovery program shall include all or a combination of the following methods:</p> <ul style="list-style-type: none">• Development of a research design to identify important research questions that may be answered through a systematic study of the resource.• Mapping and systematic collection of surface artifacts, possibly complete data recovered depending on site size.	

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
		<ul style="list-style-type: none"> Subsurface investigation through methods such as controlled hand-excavation units, machine excavations, deep testing, or a combination of methods. When applicable, other techniques, such as geophysical testing, may be warranted. Analysis of recovered material through visual inspection and chemical analysis when applicable. Preparation of a report. Appropriate curation of collected artifacts. <p>If the resource is precontact in nature, the Phase III investigation shall be coordinated with descendant tribal communities.</p>	
CUL-3: The proposed project may cause a substantial adverse change in the significance of archaeological cultural resources that are accidentally discovered during project construction	Potentially Significant	<p>Mitigation Measure CUL-2: Inadvertent Discovery of Archaeological Cultural Resources</p> <p>In the event that cultural resources are exposed during ground-disturbing activities, construction activities shall be halted within 100 feet of the discovery. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts, or features, including hearths, structural remains, or historic-era dumpsites. If the resources cannot be avoided during the remainder of construction, a consulting archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards for archaeology shall assess the resource and provide appropriate management recommendations. The County shall implement those recommendations to avoid or substantially reduce the severity of impacts on significant resources.</p>	Less than Significant
CUL-4: The proposed project may disturb human remains, including those interred outside of formal cemeteries	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
CUL-5: The proposed project may result in cumulative impacts to cultural resources.	Potentially Significant	See Mitigation Measure CUL-1 and Mitigation Measure CUL-2	Less than Significant
Energy			
EN-1: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.	Less than Significant	N/A	N/A
EN-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	Less than Significant	N/A	N/A
EN-3: The proposed project would not contribute to a significant cumulative impact due to energy resources.	Less than Significant	N/A	N/A
Geology and Soils			
GEO-1: The proposed project would not directly or indirectly cause potential substantial adverse effects involving rupture of known earthquake fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction or landslides.	Less than Significant	N/A	N/A
GEO-2: The proposed project would not result in substantial soil erosion or loss of topsoil.	Less than Significant	N/A	N/A
GEO-3: The project would not 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 the on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
GEO-4: The proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1194) and would not create substantial direct or indirect risks to life or property.	Less than Significant	N/A	N/A
GEO-5: The proposed project would not require the use of septic tanks or an alternative wastewater disposal system.	No Impact	N/A	N/A
GEO-6: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than significant	N/A	N/A
GEO-7: The proposed project may result in a significant cumulative impact with respect to geology and soils.	Less than significant	N/A	N/A
Greenhouse Gas Emissions			
GHG-1: Implementation of the project would not generate GHG emissions that may have a significant impact on the environment.	Less than Significant	N/A	N/A
GHG-2: Implementation of the project would not conflict with or obstruct implementation of applicable GHG reduction plans, policies, or regulations.	Less than Significant	N/A	N/A
GHG-3: The proposed project would not contribute to a significant cumulative impact to regional and State GHG emissions.	Less than Significant	N/A	N/A
Hazards and Hazardous Materials			
HAZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
HAZ-2: The proposed project may 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	See Mitigation Measure AQ-2	Less than Significant
HAZ-3: The proposed project may emit hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Potentially Significant	See Mitigation Measure AQ-2	Less than Significant
HAZ-4: The proposed project may be located on a site that is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 of the California Government Code and, as a result, would not create a significant hazard to the public or the environment.	Potentially Significant	See Mitigation Measure AQ-2	Less than Significant
HAZ-5: The proposed project may be located within an airport land use plan or within two miles of a public airport or public use airport, however, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area.	Less than Significant	N/A	N/A
HAZ-6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Potentially Significant	See Mitigation Measure TRA-1	Less than Significant
HAZ-7: The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
HAZ-8: The proposed project may contribute to a significant cumulative impact with respect to hazards and hazardous substances.	Potentially Significant	See Mitigation Measure AQ-2 and Mitigation Measure TRA-1	Less than Significant
Hydrology and Water Quality			
HYD-1: The proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	Less than Significant	N/A	N/A
HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than Significant	N/A	N/A
HYD-3: The project may alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.	Less than Significant	N/A	N/A
HYD-4: The project would not risk release of pollutants due to project inundation due to flood hazards, tsunamis, or seiches.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
HYD-5: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than Significant	N/A	N/A
HYD-6: The proposed project would not contribute to a significant cumulative impact with respect to hydrology and water quality resources.	Less than Significant	N/A	N/A
Land Use and Planning			
LUP-1: The proposed project would not physically divide an established community.	Less than Significant	N/A	N/A
LUP-2: The proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less than Significant	N/A	N/A
LUP-3: The proposed project would not result in a significant cumulative impact with respect to land use and planning.	Less than Significant	N/A	N/A
Mineral Resources			
MIN-1: The proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.	Less than Significant	N/A	N/A
MIN-2: The proposed project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	Less than Significant	N/A	N/A
MIN-3: The proposed project would not result in a significant cumulative impact with respect to mineral resources.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Noise			
NOI-1: The proposed project may result in a temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the County Noise Ordinance.	Potentially Significant	<p>Mitigation Measure NOI-1: Construction Hours</p> <p>Construction activities shall not occur outside the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, or outside the hours of 8:00 a.m. and 5:00 p.m. on weekends, or at all on federally recognized holidays. The project applicant or construction contractor shall post a publicly visible sign at the entrance to the individual fiber project site listing the allowable construction hours and the contact information, including telephone numbers, to report noise violations to the County and the contractor.</p> <p>Mitigation Measure NOI-2: Backup Generator Noise Control</p> <p>Prior to approving individual fiber projects that require an emergency back generator, the County shall verify project plans including the following:</p> <ul style="list-style-type: none"> Where feasible, emergency backup generators shall be installed no closer than 60 feet from any noise sensitive land use (NSLU; e.g., residences, schools, hospitals, convalescent homes, churches, libraries) in a community area, and no closer than 105 feet from any NSLU in a rural area. If it is not feasible to locate emergency generators 60 feet or more from NSLU in community areas or 105 feet or more from NSLUs in rural areas, the project proponent shall incorporate noise attenuating features (e.g., generator sound enclosures, noise barriers) into the equipment installation sufficient to reduce generator noise levels to 50 dBA LEQ or less measured at outdoor use areas or building edges of the closest NSLU. Noise levels at NSLUs shall be verified by a qualified acoustical professional. 	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
NOI-2: The proposed project would not result in the generation of excessive groundborne vibration levels.	Potentially Significant	<p>Mitigation Measure NOI-3: Vibratory Roller Use</p> <p>Prior to issuing individual project construction approvals or permits, the County shall insure that construction documentation includes the following restrictions. Vibratory rollers shall be used in static mode only (no vibrations) within the following distances:</p> <ul style="list-style-type: none"> • Within 15 feet of any occupied building; and • Within 18 feet of any older residential building; and • Within 60 feet of a fragile historical building, ruin, or ancient monument. 	Less than Significant
NOI-3: The proposed project would not expose people residing or working in the project area to excessive noise levels from public use airports or private airstrips.	Less than Significant	N/A	N/A
NOI-4: The proposed project may contribute to a cumulatively considerable impact on ambient noise levels in the County.	Potentially Significant	See Mitigation Measure NOI-1, Mitigation Measure NOI-2, and Mitigation Measure NOI-3	Less than Significant
Population and Housing			
POP-1: The proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly.	Less than Significant	N/A	N/A
POP-2: The proposed project would not displace existing people or housing or necessitate the construction of replacement housing elsewhere.	Less than Significant	N/A	N/A
POP-3: The proposed project would not contribute to a cumulatively considerable impact on population and housing.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Public Services			
PS-1: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities.	Less than Significant	N/A	N/A
PS-2: The proposed project would not result in a significant cumulative impact with respect to public services.	Less than Significant	N/A	N/A
Recreation			
REC-1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than Significant	N/A	N/A
REC-2: The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Less than Significant	N/A	N/A
REC-3: The proposed project would not result in a significant cumulative impact with respect to recreation.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Transportation			
TRA-1: The proposed project may conflict with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities.	Potentially Significant	<p>Mitigation Measure TRA-1: Traffic Control and Detour Plan</p> <p>Prior to the issuance of an encroachment permit, a Traffic Control and Detour Plan shall be developed for individual fiber projects that would require an encroachment permit for construction activities along ROW to manage traffic during construction. The applicant shall consult with the Lead Agency and/or Caltrans prior to initiation of construction activities that may affect area traffic (such as construction staging necessitating lane closure, trenching, etc.) to ensure that the Traffic Control and Detour Plan is prepared in conformance with applicable code and ordinance requirements for emergency access. The construction contractor shall implement appropriate traffic controls identified in the Traffic Control and Detour Plan in accordance with the California Vehicle Code and other State and local requirements to avoid or minimize impacts on traffic during construction. The Traffic Control and Detour Plan shall be submitted to the agency responsible for issuing the encroachment permit for review and approval prior to the commencement of construction activities.</p>	Less than Significant
TRA-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).	Less than Significant	N/A	N/A
TRA-3: The proposed project may substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Potentially Significant	See Mitigation Measure TRA-1	Less than Significant
TRA-4: The proposed project may result in inadequate emergency access.	Potentially Significant	See Mitigation Measure TRA-1	Less than Significant
TRA-5: The proposed project may contribute to a significant cumulative impact with respect to transportation.	Potentially Significant	See Mitigation Measure TRA-1	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
Tribal Cultural Resources			
TCR-1: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	Potentially Significant	<p>Mitigation Measure TCR-1: Tribal Consultation</p> <p>El Dorado County shall conduct the appropriate tribal consultation outreach to relevant California Native American tribes, pursuant to PRC Section 21080.3.1, for all individual fiber projects included within the scope of the El Dorado County Broadband Fiber Project Program EIR. Pursuant to PRC Section 21080.3.1 (b), the tribes will have 30 days for AB 52 from the receipt of the request for consultation to either request or decline consultation, in writing, with the County for each proposed individual fiber project. In the event that a general plan or specific plan adoption or amendment is required for the implementation of an individual fiber project, the County shall comply with the requirements of Senate Bill 18 (SB 18), in coordination with AB 52, as described in California Government Code Section 65352.3.</p>	Less than Significant
TCR-2: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	See Mitigation Measure TCR-1	Less than Significant

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
TCR-3: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource inadvertently discovered during construction.	Potentially Significant	<p>Mitigation Measure TCR-2: Archaeological Treatment and Tribal Consultation</p> <p>In the event that potential tribal cultural resources (TCRs) are exposed during ground-disturbing activities, construction activities (e.g., grading, grubbing, or vegetation clearing) shall be halted in the immediate vicinity of the discovery. An archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards shall then be retained to evaluate the resource's significance under CEQA in direct coordination with tribal members who would provide traditionally based cultural knowledge as a basis for collaboratively assessing said significance. If the discovery proves to be significant, additional work and mitigation measures, such as those listed in Mitigation Measures CUL-1 and CUL-2, as deemed appropriate by the tribal organization consulting on the find. Such mitigation may include avoidance, data recovery excavation, or traditional ethnographic research into the cultural importance of the find to contemporary descendant communities.</p>	Less than Significant
TCR-4: The proposed project may result in a cumulative impact with respect to tribal cultural resources.	Potentially Significant	See Mitigation Measure TCR-1 and Mitigation Measure TCR-2	Less than Significant
Utilities and Service Systems			
UTL-1: The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
UTL-2: The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Less than Significant	N/A	N/A
UTL-3: The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant	N/A	N/A
UTL-4: The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Less than Significant	N/A	N/A
UTL-5: The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.	Less than Significant	N/A	N/A
UTL-6: The proposed project would not result in a significant cumulative impact with respect to utilities.	Less than Significant	N/A	N/A
Wildfire			
FIRE-1: The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Potentially Significant	See Mitigation Measure TRA-1	Less than Significant
FIRE-2: Due to slope, prevailing winds, and other factors, the project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less than Significant	N/A	N/A

Significant Impact	Significance Without Mitigation	Mitigation Measures	Significance with Mitigation
FIRE-3: The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than Significant	N/A	N/A
FIRE-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Less than Significant	N/A	N/A
FIRE-5: The proposed project would be located in a State Responsibility Area but would not contribute to a significant cumulative impact with respect to wildfire.	Potentially Significant	See Mitigation Measure TRA-1	Less than Significant

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1.0 INTRODUCTION

The El Dorado County Broadband Fiber Project, herein referred to as “proposed Project” or “Project”, would expand access to fiber optic broadband technology throughout the unincorporated areas and incorporated cities within El Dorado County (County). The County is the California Environmental Quality Act (CEQA) Lead Agency for the proposed Project. This program Environmental Impact Report (EIR) is a Countywide document that also incorporates the cities of Placerville and South Lake Tahoe. The majority of the broadband infrastructure is anticipated to be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation’s (Caltrans’) public rights-of-way (ROW). However, broadband infrastructure could also be constructed on private and federal lands that would connect to existing conduit or utility poles located within public or private utility easements.

1.1 ENVIRONMENTAL IMPACT REPORT

1.1.1 Overview of an EIR

Pursuant to CEQA, preparation of an EIR is required whenever it can be fairly argued, based on substantial evidence, that a proposed project may result in a significant environmental impact. An EIR is an informational document used to inform public-agency decision makers and the general public of the significant environmental impacts of a project, identify possible ways to minimize the significant impacts, and describe reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project while substantially lessening or avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project.

1.1.2 Program EIR

This EIR has been prepared to meet the requirements of a program EIR as defined in CEQA Guidelines Section 15168(c) for streamlining later activities. In accordance with Section 15168 of the CEQA Guidelines, a program EIR may be prepared on a series of actions that can be characterized as one large project and are related to, among other things, the issuance of general criteria to govern the conduct of a continuing program or individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways. The proposed Project meets these criteria for the use of a program EIR.

In accordance with CEQA Guidelines Section 15168(c), subsequent activities consistent with the proposed Project would be examined in light of the information in this program EIR to determine whether additional environmental documentation must be prepared. It is expected that the applicable Lead Agency (determined by location of the individual fiber project) will review the impact analysis for individual fiber projects and determine whether and what level of additional CEQA documentation and review is appropriate to adequately address impacts from the individual fiber projects when more detailed plans are available.

If individual fiber project activities are determined to be within the scope of the program EIR, the applicable Lead Agency may approve the activities using this program EIR and project-specific consistency checklist without an additional environmental document, pursuant to CEQA Guidelines

Section 15162. In this situation, the Lead Agency must incorporate all feasible mitigation measures from the program EIR into the subsequent individual fiber project, as needed, to address significant or potentially significant effects on the environment covered by the program EIR. A template for the consistency checklist is included as Appendix A to this program EIR.

If a subsequent individual fiber project or later activity would have effects that were not examined in this program EIR, an initial study may be prepared to determine the appropriate level of environmental review. If another environmental document is needed, whether it is a notice of exemption, negative declaration, mitigated negative declaration, or EIR, the program EIR can be used to simplify the task of preparing the subsequent environmental document, as indicated in CEQA Guidelines Section 15168(d). As appropriate, when the Lead Agency receives an application for an individual fiber project, they will process additional CEQA documentation, if required, that builds on the analysis presented in this program EIR.

1.2 ENVIRONMENTAL ASSESSMENT

The National Telecommunications and Communications Service (NTIA) under the Department of Commerce is the National Environmental Policy Act (NEPA) Lead Agency. An Environmental Assessment was prepared in compliance with Federal NEPA requirements and is included as Appendix B to this EIR.

1.3 FUNDING

This program EIR will achieve compliance with CEQA such that entities can take advantage of current and future funding for broadband infrastructure provision expected to be available through the California Emerging Technology Fund (CETF) and other federal and State funding sources. In the immediate near term, the County will be including this Project into a Local Agency Technical Assistance (LATA) application as a means to assist in paying for this Project.

1.4 SCOPE AND ORGANIZATION OF THE EIR

Sections 15120 through 15132 of the CEQA Guidelines present the required content for Draft and Final EIRs. An EIR must include a brief summary of the proposed project and its consequences, a description of the proposed project, a description of the environmental setting, an environmental impact analysis, mitigation measures proposed to minimize potentially significant effects, cumulative impacts, alternatives to the proposed project, significant irreversible environmental changes, growth inducement, effects found not to be significant, effects found to be significant and unavoidable, and organizations and persons consulted.

In accordance with CEQA, this program EIR: (1) identifies the potential significant effects of the proposed Project on the environment and indicates the manner in which those significant effects can be avoided or mitigated; (2) identifies any unavoidable adverse impacts that cannot be mitigated; and (3) analyzes reasonable alternatives to the proposed Project. Although the program EIR does not control the final decision on the proposed Project, the Lead Agency shall consider the information in the program EIR and respond to each significant effect identified in the program EIR.

As the CEQA Lead Agency, El Dorado County identified the following issues areas to be analyzed in detail in this program EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

This program EIR is organized in the following chapters:

- **Executive Summary:** Consistent with Section 15123 of the CEQA Guidelines, this chapter provides a brief summary of the proposed Project and identifies environmental impacts and mitigation measures in a summary matrix.
- **Chapter 1.0 – Introduction:** This chapter presents an overview of the Project background and describes the intended use of the program EIR (CEQA Guidelines Section 15124(d)), as well as the environmental review process.
- **Chapter 2.0 – Project Setting and Location:** This chapter includes a description of the physical environmental conditions in the vicinity of the Project site as they existed at the time the Notice of Preparation (NOP) was published, and which have been updated based on current conditions during preparation of this program EIR, consistent with Section 15125 of the CEQA Guidelines.
- **Chapter 3.0 – Project Description:** This chapter provides a detailed description of the proposed Project characteristics and objectives as well as the required discretionary approvals consistent with Section 15124 of the CEQA Guidelines.
- **Chapter 4.0 – Environmental Impact Analysis:** This chapter contains a comprehensive analysis of the potential impacts to each environmental area evaluated in this program EIR, feasible measures that could minimize or mitigate those impacts consistent with Section 15126.4 of the CEQA Guidelines, and cumulative impacts resulting from the combination of the proposed Project together with other Countywide projects/plans causing related impacts consistent with Section 15130 of the CEQA Guidelines.
- **Chapter 5.0 – Project Alternatives:** Consistent with Section 15126.6 of the CEQA Guidelines, this chapter evaluates a range of reasonable alternatives to the Project which would feasibly attain most of the basic objectives of the Project, but would avoid or substantially lessen any of the significant effects of the Project. Alternatives other than the proposed Project evaluated in this document include: (1) No Project Alternative; (2) Aerial Installation Only Alternative; (3) Underground Installation Only Alternative; and (4) Use of Existing Infrastructure Alternative.
- **Chapter 6.0 – Significant Irreversible Environmental Changes:** Consistent with Section 15126.2(d) of the CEQA Guidelines, this chapter outlines the significant irreversible changes anticipated to occur as a result of the proposed Project.

- **Chapter 7.0 – Growth Inducement:** Consistent with Section 15126.2(e) of the CEQA Guidelines, this chapter describes potential growth-inducing impacts associated with the proposed Project.
- **Chapter 8.0 – Significant and Unavoidable Impacts:** Consistent with Section 15126.2(c) of the CEQA Guidelines, this chapter describes any significant impacts identified, including those which can be mitigated but not reduced to a level of insignificance.
- **Chapter 9.0 – List of Preparers:** This chapter lists all authors and agencies that assisted in the preparation of the report by name, title, and company or agency affiliation.
- **List of Appendices:**
 - Appendix A – Consistency Checklist**
 - Appendix B – NEPA Environmental Assessment**
 - Appendix C – NOP Comment Letters**
 - Appendix D – Mitigation Monitoring and Reporting Program**
 - Appendix E – CalEEMod Output**
 - Appendix F – Special-Status Species Potential to Occur Table**

1.5 ENVIRONMENTAL REVIEW PROCESS

The preparation, review, and certification process for the program EIR involves the following steps:

1.5.1 Notice of Preparation

After deciding that an EIR is required, the Lead Agency must file a NOP soliciting input on the scope of the EIR with the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (CEQA Guidelines Section 15082; Public Resources Code [PRC] Section 21092.2). The NOP must be posted in the County Clerk’s office for 30 days.

The NOP for this program EIR was circulated for a 30-day agency and public review period that started on August 26, 2024, and ended on September 30, 2024. A virtual public hearing to receive comments on the scope of the program EIR was held on September 25, 2024. The NOP and scoping process solicited comments from identified responsible and trustee agencies, as well as interested parties regarding the scope of the program EIR. Appendix C of this program EIR includes the NOP comments received in response to the circulation of the NOP.

1.5.2 Draft EIR

The Draft EIR must contain information required by CEQA Guidelines Sections 15122 through 15131, including: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing, and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.

1.5.3 Public Notice/Public Review of Draft EIR

The principal objectives of CEQA require that: (1) the environmental review process provides for public participation, and (2) the EIR serves as an informational document to inform members of the general public, responsible and trustee agencies, and the decision-makers of the physical impacts associated with a proposed project.

Upon completion of the Draft EIR, the Lead Agency must file a Notice of Completion (NOC) with the State Clearinghouse and prepare a public Notice of Availability (NOA) of the Draft EIR. The NOA must be posted in the County Clerk's office for 45 days (PRC Section 21092), and the Lead Agency must send a copy of the NOA to anyone who has requested it (CEQA Guidelines Section 15087). Additionally, a NOA of a Draft EIR must be provided through at least one of the following procedures: a) publication in a newspaper of local circulation; b) posting on and off the project site; or c) direct mailing to owners and occupants of contiguous properties. The Lead Agency must solicit input from other agencies and the public and respond in writing to all comments received (PRC Sections 21104 and 21253).

This Draft EIR will be available for review by the public and interested parties, agencies, and organizations for a 45-day comment period beginning on March 14, 2025, and ending on April 28, 2025. During the comment period, the public is invited to submit comments on the Draft EIR to the County of El Dorado Economic Development Department.

Written comments on this Draft EIR should be submitted to:

County of El Dorado, Economic Development Department
2850 Fairlane Court
Placerville, CA 95667
Email: economic.development@edcgov.us

1.5.4 Final EIR

Following the conclusion of the 45-day public review period for the Draft EIR, the County will review all comments received and prepare written responses to comments on environmental issues. A Final EIR will then be prepared, which contains all of the comments received, responses to comments raising environmental issues, and any changes to the Draft EIR (if necessary). The Final EIR will then be presented to the El Dorado County Board of Supervisors (Board of Supervisors) for certification. All agencies, organizations, and individuals who commented on the Draft EIR will be notified of the availability of the Final EIR and date of the public hearing before the Board of Supervisors.

Responses to comments submitted on the Draft EIR by public agencies will be provided to those agencies at least 10 days prior to certification of the program EIR. Public input is encouraged at all public hearings before the County. The Board of Supervisors will also make findings regarding each significant environmental impact of the Project as identified in the Final EIR. For each significant impact of the Project identified in the program EIR, the Lead Agency must find, based on substantial evidence, that either: a) the Project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the Project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or Project alternatives infeasible (CEQA Guidelines Section 15091). If an agency approves a project with unavoidable significant environmental impacts, it must prepare a written Statement of Overriding

Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.

The Final EIR will need to be certified by the County as having been prepared in compliance with CEQA prior to deciding to approve or deny the Project. After the Board of Supervisors certifies the Final EIR, it may then consider whether to approve the Project. The Board of Supervisors will certify and make conditions of project approval of all feasible mitigation measures identified in the program EIR.

1.5.5 Notice of Determination

The Lead Agency must file a Notice of Determination (NOD) after deciding to approve a project for which an EIR is prepared (CEQA Guidelines Section 15094). A local agency must file the NOD with the County Clerk within five working days after approval of the project by the Lead Agency. If the project requires discretionary approval from any State agency, then the local Lead Agency shall also file a copy of the NOD with the State Clearinghouse within five working days after project approval. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (PRC Section 21167[c]).

1.5.6 Mitigation Monitoring and Reporting Program

PRC Section 21081.6 requires that the Lead Agency adopt a mitigation monitoring and reporting program (MMRP) for any project for which it has adopted mitigation measures. The MMRP, included as Appendix D, is intended to ensure compliance with the mitigation measures identified in this program EIR to reduce potentially significant impacts.

2.0 PROJECT SETTING AND LOCATION

2.1 PROJECT SETTING

El Dorado County (County) is located in northern California, bordered by Placer County to the north, Amador and Alpine counties to the south, Sacramento County to the west, and the state of Nevada to the east. The County is located in the central Sierra Nevada, east of the Central Valley. The County covers approximately 1,789 square miles (1,145,385 acres) ranging from the residential foothills of El Dorado Hills to the high Sierra Nevada Mountain Range. Several major roadways, including U.S. Highway 50 and State Routes (SRs) 49, 88, and 89, traverse the County. Elevations range from 200 feet above mean sea level (amsl) at the western end of the County to 10,881 feet atop Freel Peak on the edge of the Lake Tahoe Basin. Placerville and South Lake Tahoe are the two incorporated cities within the County; however, there are other several unincorporated communities located throughout the County (County 2003).

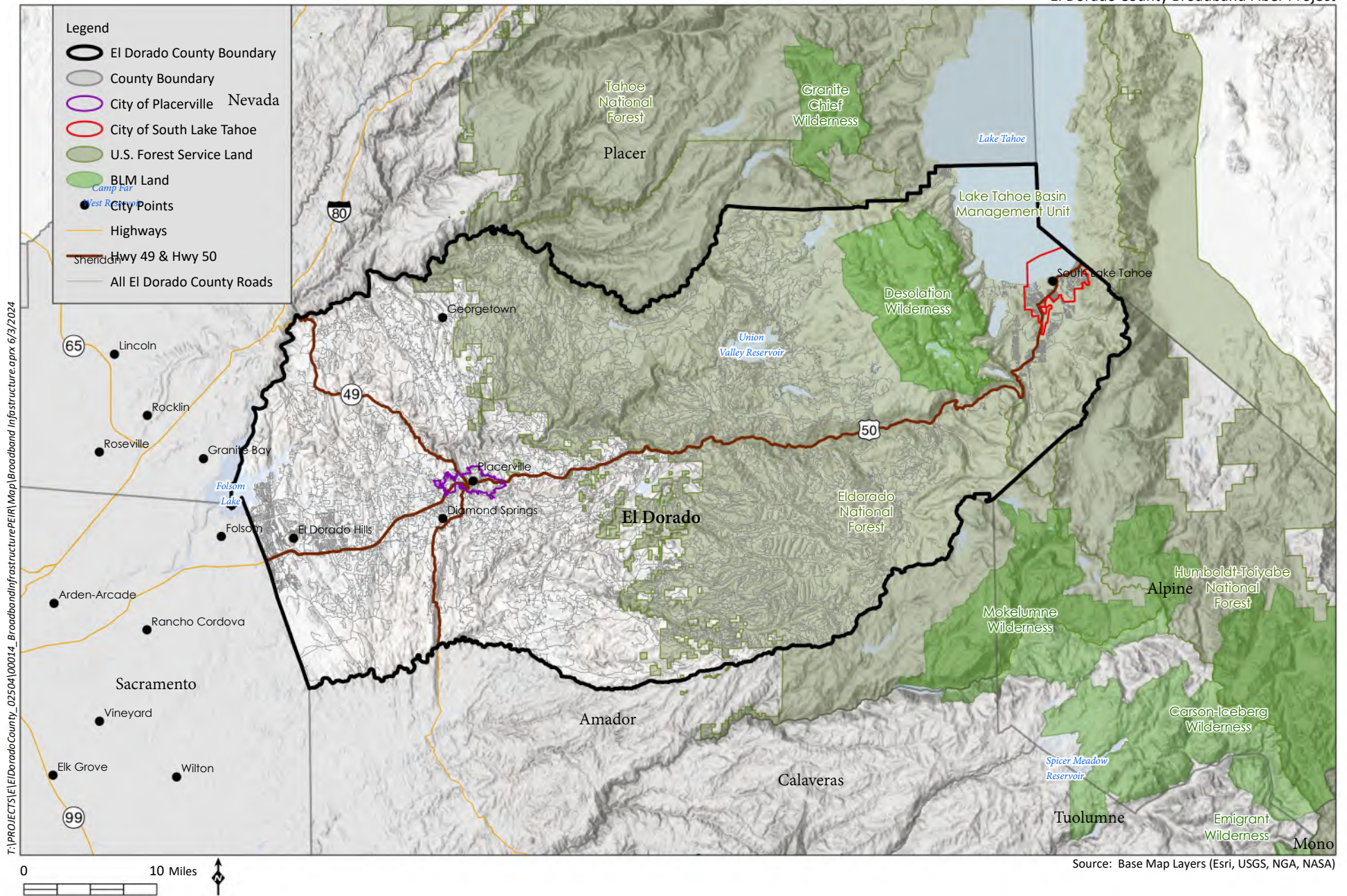
2.2 PROJECT LOCATION

The El Dorado County Broadband Fiber Project (Project) is located within the unincorporated areas of the County and within the two incorporated cities of the County, the cities of Placerville and South Lake Tahoe. See Figure 2-1, *Project Location Map*. The majority of future fiber optic broadband infrastructure would be constructed within typical roadway cross-section within the County, cities, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). However, broadband infrastructure could also be constructed on private and federal lands and could connect to existing conduit or utility poles located within public or private utility easements. The exact alignment of future broadband infrastructure is currently unknown at this time; however, siting of future broadband infrastructure is anticipated to be based on such considerations as construction feasibility, local demand, and locations of sensitive environmental resources.

This program Environmental Impact Report (EIR) conservatively assumes that new ground disturbance would be required for the entire Project; however, there would be potential for utilizing existing conduit where only installation of fiber optic line would be required. Existing conduit or utility poles could be located within public or private utility easements throughout the unincorporated areas of the County or the incorporated cities. If feasible, the new broadband infrastructure constructed under the proposed Project could connect to existing broadband infrastructure (e.g., aboveground and belowground) in the County supported by existing internet service providers (ISPs).

2.3 REFERENCES

El Dorado County (County). 2003. El Dorado County General Plan Draft Environmental Impact Report. May. Available at:
[https://www.edcgov.us/Government/planning/pages/draft_environmental_impact_report_\(dei_r\).aspx](https://www.edcgov.us/Government/planning/pages/draft_environmental_impact_report_(dei_r).aspx).



3.0 PROJECT DESCRIPTION

As the California Environmental Quality Act (CEQA) Lead Agency, El Dorado County (County) is proposing the El Dorado County Broadband Project (Project), a countywide Project to expand access to fiber optic broadband technology throughout the unincorporated areas and incorporated cities of the County. The majority of the broadband infrastructure would be built within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or the California Department of Transportation's (Caltrans') public rights-of-way (ROW). However, broadband infrastructure could also be constructed on private and federal lands and could connect to existing conduit or utility poles located within public or private utility easements. The location and installation of fiber optic lines by a variety of potential methods (e.g., underground via directional bore and trenching or aerial installation) is evaluated at a program level in this Environmental Impact Report (EIR) for the County as a whole. The objective of this program EIR is to achieve compliance with CEQA for the proposed Project in advance, such that subsequent individual fiber projects can streamline the environmental review process by falling within the scope of the proposed Project covered in this program EIR.

The National Telecommunications and Information Administration (NTIA) under the Department of Commerce is the National Environmental Protection Agency (NEPA) Lead Agency. An Environmental Assessment was prepared in compliance with federal NEPA requirements and is included as Appendix B to this program EIR.

3.1 PROJECT NEED

Broadband provides high-speed internet access via multiple types of technologies, including fiber optics, wireless, cable modem, digital subscriber line (DSL), broadband over powerlines (BPL), and satellite. The proposed Project would utilize fiber optic technology that converts light electrical signals and sends the light through transparent glass fibers about the diameter of a human hair (FCC 2023). Fiber optic technology transmits data at speeds far exceeding current DSL or cable modem speeds.

While some areas of the County have sufficient internet speeds for daily work and home life, there are still large portions of the County with no coverage or coverage so slow that it has become prohibitive to perform daily, essential tasks. Providing broadband internet in the County has been challenging for several reasons. Primarily, the topography and geography of the County present physical barriers to broadband connectivity. Subsurface rock throughout the County is difficult and expensive to trench while dense forests, hills, and canyons may obstruct the sight lines needed for wireless technology. Finally, the County is rural in nature and its population densities are too low to attract market-rate broadband infrastructure investors.

The proposed Project provides an opportunity to address the lack of broadband service in many areas of the County. The proposed Project would help attract broadband infrastructure investors to bring broadband service to a County in need of reliable connectivity for increasing health and safety factors, as well as for economic and quality of life reasons. Expansion of broadband service and its associated infrastructure is vital to the various communities and cities in the County for many reasons, which include but are not limited to:

- Building social and community connections;
- Bolstering economic development and sustainability;
- Increasing telework and skilled workforce training; and
- Enhancing telemedicine.

3.2 PROJECT OBJECTIVES

Per Section 15124 of the CEQA Guidelines, the County identified the following objectives for the proposed Project:

- Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;
- Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;
- Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;
- Streamline the environmental review process for individual fiber projects that are implemented in the County;
- Identify known environmental and cultural resources to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,
- Save time and money for both El Dorado County and individual fiber project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review individual fiber projects and avoiding duplication of applicant costs.

3.3 PROPOSED FACILITIES

The County is proposing to expand access to fiber optic broadband technology throughout the unincorporated areas and incorporated cities within the County. The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. It is anticipated that the depth of excavation for buried conduits would be 5 feet. Additionally, the maximum height of utility poles would be 100 feet. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. However, broadband infrastructure could also be constructed on private and federal lands. The exact alignment of future broadband infrastructure is currently unknown at this time and would be sited based on such considerations as construction feasibility, local demand, and locations of sensitive environmental resources.

Underground fiber optic conduit or aboveground utility poles would typically be located in previously disturbed and/or developed areas (e.g., in ROW). Many of these fiber optic conduits or utility poles would generally follow the route of the roadway, particularly if the applicable areas have other issues that could affect access, such as vegetation, geologic, landscape, and/or water features that should not be disturbed. The fiber optic infrastructure could follow other utility installations; therefore, it is likely that the ground along these alignments has been previously disturbed by prior utility work. This program EIR conservatively assumes that new ground disturbance would be required for the entire Project; however, there would be potential for utilizing existing conduit or utility poles where only installation of fiber optic lines would be required. If deemed feasible, the new broadband infrastructure constructed under the proposed Project would connect to existing broadband infrastructure (e.g., aboveground and belowground) in the County supported by existing internet service providers (ISPs).

3.4 PROJECT CONSTRUCTION

3.4.1 Construction Schedule and Methods

The proposed Project would include construction of individual fiber projects in Spring 2025, and implementation of individual fiber projects would likely occur over the course of many years. It is possible that multiple individual fiber projects could have overlapping construction timeframes (or phases). Additionally, any individual segment could involve multiple construction crews working simultaneously, with plowing, trenching, and directional drilling occurring at the same time in different locations of the segment. Construction activities would occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on weekends.

The construction methods for individual fiber projects would be determined based on various factors such as location, site conditions, and site constraints. These methods include horizontal directional drilling, plowing, trenching, and microtrenching. Horizontal directional drilling involves drilling a pilot bore string towards existing access points, then attaching the conduit and pulling it back to install it. Temporary work areas would be established at the entry and exit pits for the bore rig and installation of access vaults. A plowing technique could be used in unpaved areas, where a vibratory cable plow incises the soil and lays the conduits simultaneously. Tracked vehicles are typically used for plowing. In wet or soft conditions, a specialized "spider plow" may be used to minimize disturbance. Trenching would be employed in areas where plowing is unsuitable, typically due to rocky soil or existing underground infrastructure. A backhoe or similar equipment would create a trench of varying width and depth, and the conduit would be placed at the bottom before backfilling and compacting the trench. In narrow or sensitive areas, pavement cutting and narrow trenching may be necessary, with slurry backfilling and repaving. Microtrenching is an option for paved areas or sidewalks, involving a narrow excavation trench that is backfilled with slurry or cement and sealed with grout, epoxy, or other sealer.

Once the conduit system is in place, the fiber optic line or microducts would be installed by pulling or blowing them into the conduits. Compressed air or hydraulic pullers would be used for the installation, ensuring smooth pulling within specified tension limits. A pull line would be attached to a plug pushed through the conduit, and then the pull line would be pulled back, threading the fiber optic line through the conduit. Tension limiters and monitors would be used to record the pulling tensions encountered.

To facilitate fiber optic installation, temporary assist points may be excavated if there is damage to the conduit. Access vaults, also known as handholes or pull boxes, could be placed along the alignment to allow for fiber optic line-splicing locations and future access to the buried conduits. Each vault would

typically house a length of line slack and would be equipped with a traffic-bearing cover. These vaults would be installed as the final step in the horizontal directional drill process, usually in the same excavations used for drill entry and exit points.

In areas where trenching is challenging or topography is extreme, aerial stringing could be used, utilizing existing utility poles, or installing new poles. Guy wires may be used for additional stability, and self-supporting poles may be used where guy wires are not feasible or burying the pole base is not possible.

3.4.2 Preconstruction Activities

A Worker Environmental Awareness Program (WEAP) would be implemented prior to construction to educate workers about the County's sensitive biological and cultural resources, as well as potential contamination risks. All field staff, including employees, contractors, and subcontractors involved in construction, would be required to participate in the WEAP. The WEAP would communicate policies, mitigation measures, and protective measures that must be followed, such as avoiding ground-disturbing activities near sensitive biological or cultural resources. In the case of hazardous material concerns, workers would be informed and the El Dorado County Fire Protection District and/or the City of South Lake Tahoe Fire Rescue would be notified depending on the location of the hazardous concern. Additionally, staff would be educated about proper handling and disposal procedures for hazardous wastes according to federal, State, and local regulations.

3.4.3 Surface Restoration

Site cleanup and surface restoration under the Project would be performed promptly following broadband infrastructure installation. Cleanup would include removing construction-related debris and restoring original surfacing and contours. Any disturbed areas would be returned to their original or better condition by replacing all asphalt, landscaping, or any earthen areas.

3.4.4 Construction Staging Areas and Equipment

Staging areas are planned to be established in typical roadway cross-sections. If road constraints prevent locating staging areas along roadways, alternative areas such as previously disturbed private or public land would be used. The exact locations of staging areas and equipment lay-down areas would be determined during the final construction plans for each individual fiber project. Construction companies awarded contracts for specific segments would select the staging area locations. Staging areas would be used to mobilize crews, and refueling would not take place in the field. Any construction within the County, city, or Caltrans ROW would require an encroachment permit from the relevant jurisdiction. Any construction on federal land would require an easement or ROW for construction and long-term maintenance of the infrastructure from the relevant federal agency. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be employed for all construction activities along public ROW, and would be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits.

The construction methods would involve different types of vehicles and equipment depending on the specific installation taking place. The main construction methods include horizontal directional drilling, plowing, trenching, microtrenching, line installation, aerial stringing, and pavement repair. The equipment used may include bore/drill rigs, cranes, generator sets, excavators, tractors, loaders, backhoes, crawler tractors, air compressors, rough terrain forklifts, concrete/individual saws, rollers, and

cement and mortar mixes. It is assumed that the fiber installation locations would be accessible by trucks and other construction equipment, and helicopter use is not expected to be necessary. The specific equipment required for each individual fiber project would vary based on construction methods and site conditions.

3.5 PROJECT OPERATIONS

Operational activities for any individual fiber projects implemented under the Project would be limited to routine maintenance and emergencies. Infrastructure such as circuit cabinets with cooling fans and/or stand-by generators associated with individual fiber projects may be routinely checked, as needed.

3.6 POTENTIAL PERMITS AND APPROVALS REQUIRED

A listing and brief description of the approvals and/or regulatory permits required to implement the proposed Project are provided below. This environmental document is intended to address the environmental impacts associated with the following discretionary actions and approvals.

3.6.1 El Dorado County

- **Grading Permit**
- **Encroachment Permit**
- **Consideration of the Environmental Document:** El Dorado County will act as the Lead Agency as defined by CEQA and will have authority to determine if the environmental document (Environmental Impact Report) is adequate under CEQA and the State CEQA Guidelines.
- **Project Approval:** El Dorado County Board of Supervisors will consider approval of the Project and the entitlements described above.

3.6.2 Other Local, State, or Federal Agencies

Depending on the individual fiber project character, location, and construction techniques of future broadband, potential permits and approvals that could be required are identified by the agencies below.

City of Placerville: Depending on the location of the broadband infrastructure, a grading permit or encroachment permit may be required from the City of Placerville.

City of South Lake Tahoe: Depending on the location of the broadband infrastructure, a grading permit or encroachment permit may be required from the City of South Lake Tahoe.

Tahoe Regional Planning Agency: Depending on the location of the broadband infrastructure, a grading permit or encroachment permit may be required from the Tahoe Regional Planning Agency (TRPA).

Bureau of Land Management (BLM): The BLM requires a ROW be acquired for projects such as electric power or fiber optic lanes, wind or solar generation, communication tower sites, roads or trails, canals, pipeline or reservoirs that may be located within BLM land.

California Department of Fish and Wildlife (CDFW): The California Department of Fish and Wildlife requires a Lake and Streambed Alteration Agreement (LSAA) when a project activity may substantially adversely affect fish and wildlife resources. Fish and Game Code Section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or
- Deposit or dispose of material into any river, stream, or lake.

California Department of Parks and Recreation: The California Department of Parks and Recreation requires a license agreement to be acquired when a project activity may be located on California Department of Parks and Recreation-owned land.

California Department of Transportation (Caltrans): Caltrans requires that an encroachment permit be acquired when a project activity may be located within Caltrans ROW.

California Tahoe Conservancy: The California Tahoe Conservancy requires a license agreement to be acquired when a project activity may be located on California Tahoe Conservancy-owned land.

Central Valley Regional Water Quality Control Board (CVRWQCB) or the Lahontan Regional Water Quality Control Board (LRWQCB): The State Water Resources Control Board, Division of Water Quality, requires that a Construction General Permit be obtained for projects that disturb more than 1 acre of soil. Typical conditions issued with such a permit include the submittal of and adherence to a Stormwater Pollution Prevention Plan (SWPPP), as well as prohibitions on the release of oils, grease, or other hazardous materials during construction. The project applicant and/or construction contractor would be required to file a Notice of Intent with the CVRWQCB or the LRWQCB depending on the location of the individual fiber project.

U.S. Army Corps of Engineers (USACE): The USACE requires a Nationwide Permit or Individual Permit under Section 404 of the Clean Water Act when dredged or fill material may be discharged into waters of the U.S.

U.S. Forest Service (USFS): The USFS require construction easements when a project activity may be located within USFS land.

3.7 INDIVIDUAL FIBER PROJECT REVIEW PROCESS

Individual fiber projects developed and implemented under the proposed Project would be evaluated using a consistency checklist provided by the County to determine whether or not the individual fiber project site and activities qualify as a subsequent activity within the scope of the analysis in this program EIR (State CEQA Guidelines Section 15168[c]). The consistency checklist is included as Appendix A to this program EIR. If the activities are determined to be within the scope of the program EIR, the applicable Lead Agency (determined by location of the individual fiber project) may approve activities tiering from this program EIR and relying on the project-specific consistency checklist prepared in accordance with

Section 15168 of the State CEQA Guidelines for program EIRs. If a later activity would have effects that were not examined in this EIR, a new initial study, negative declaration, or a mitigated negative declaration would be prepared to determine whether the new impact would require preparation of an EIR. That later analysis may tier from the program EIR as provided in CEQA Guidelines Section 15152. Individual fiber projects could also require permits or approvals from other federal, State, regional, or local agencies as listed in Section 3.6, Potential Permits and Approvals Required.

3.8 REFERENCES

Federal Communications Commission (FCC). 2023. Getting Broadband Q&A. Accessed March 18, 2024 and available at: <https://www.fcc.gov/consumers/guides/getting-broadband-qa>.

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4.0 ENVIRONMENTAL IMPACT ANALYSIS

CHAPTER ORGANIZATION

This chapter of the program Environmental Impact Report (EIR) is made up of 20 sections which evaluate the direct, indirect, and cumulative environmental impacts anticipated from approval of the proposed El Dorado Count Broadband Fiber Project (Project). The following sections describe the format of the environmental analysis, significance thresholds, and the methodology of the cumulative impact analysis.

FORMAT OF ENVIRONMENTAL ANALYSIS

This program EIR examines all of the environmental issue areas identified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines and through comments received on the Notice of Preparation (NOP) and public scoping meeting. The potential environmental impacts of the proposed Project are analyzed for potentially significant impacts in the following 20 environmental issue areas, which are organized with the listed abbreviations:

- Aesthetics (AES)
- Agriculture and Forestry Resources (AG)
- Air Quality (AQ)
- Biological Resources (BIO)
- Cultural Resources (CUL)
- Energy (EN)
- Geology and Soils (GEO)
- Greenhouse Gas Emissions (GHG)
- Hazards and Hazardous Materials (HAZ)
- Hydrology and Water Quality (HYD)
- Land Use and Planning (LUP)
- Mineral Resources (MIN)
- Noise (NOI)
- Population and Housing (POP)
- Public Services (PS)
- Recreation (REC)
- Transportation (TRA)
- Tribal Cultural Resources (TCR)
- Utilities and Service Systems (UTL)
- Wildfire (FIRE)

Each environmental impact is addressed in the following format:

- **Regulatory Framework:** A discussion of the federal, State, and local regulations relevant to the proposed Project.
- **Existing Conditions:** A discussion of the existing conditions and physical environment of El Dorado County (County), providing a baseline against which the potential impacts of the proposed Project can be compared.
- **Significance Thresholds:** A discussion of the thresholds of significance according to Appendix G of the CEQA Guidelines. It explains the quantitative or qualitative standards, performance levels, or criteria used to evaluate the existing setting with and without the proposed Project to determine whether the impact is significant.
- **Impact Analysis:** A discussion of the potential impacts from the proposed Project and an explanation of why impacts are found to be significant or less than significant prior to mitigation. This subsection also includes a discussion of cumulative impacts related to the

proposed Project. Impacts and mitigation measures are numbered consecutively within each topical analysis and begin with an acronym or abbreviated reference to the impact section.

SIGNIFICANCE THRESHOLDS

Significance criteria are identified before the impact analysis subsection, under the subsection, “Significance Thresholds.” For each impact identified, a level of significance is determined using the following classifications:

- *Potentially significant impact* includes a description of the circumstances where an established or defined threshold would be exceeded.
- *Less than significant impact* includes effects that are noticeable, but do not exceed established or defined thresholds, or can be mitigated below such thresholds.
- *No impact* describes circumstances where there is no adverse impact on the environment.

For each impact identified as being potentially significant, the program EIR identifies mitigation measures to reduce, eliminate, or avoid the adverse impact. *Significant and unavoidable* impacts are described where mitigation measures would not reduce these impacts to less than significant levels.

CUMULATIVE IMPACT ANALYSIS

CEQA Guidelines Section 15130 requires an EIR to discuss the cumulative impacts of a project when the project’s incremental impact is “cumulatively considerable.” Used in this context, cumulatively considerable means that the incremental impacts of an individual project are considerable when viewed in connection with the impacts of past projects, other current projects, and probable future projects.

Where the incremental impact of a project is not “cumulatively considerable,” a Lead Agency need not consider that impact significant but must briefly describe its basis for concluding that the incremental impact is not cumulatively considerable. Where the cumulative impact caused by the project’s incremental impact and the impacts of other reasonably foreseeable projects is not significant, the EIR must briefly indicate why the cumulative impact is not significant.

The cumulative impact discussions in Sections 4.1 through 4.20 explain the geographic scope of the area affected by each cumulative impact (e.g., immediate project areas, Countywide, air or groundwater basin). The geographic area considered for each cumulative impact depends upon the impact that is being analyzed. For example, in assessing aesthetic impacts, the pertinent geographic study area is the area from which a new development can be publicly viewed and may contribute to a significant cumulative visual impact. In assessing macro-scale air quality impacts, on the other hand, all development within the air basin contributes to regional emissions of criteria pollutants, and basin-wide projections of emissions is the best tool for determining the cumulative impact.

CEQA Guidelines Section 15130 permits two different methodologies for completion of the cumulative impact analysis:

- The ‘list’ approach permits the use of a list of past, present, and probable future projects producing related or cumulative impacts, including projects both within and outside the County; or
- The ‘projections’ approach allows the use of a summary of projections contained in an adopted plan or related planning document, such as a regional transportation plan, or in an EIR prepared for such a plan. The projections may be supplemented with additional information such as regional modeling.

This analysis is based on a combination of the list and plan/projections approaches. As shown in Table 4-1, the cumulative projects list includes 78 approved, planned, or pending transportation projects in the County at the time that the NOP for this program EIR was issued for consideration in the cumulative analysis. The cumulative projects list is focused on transportation-related projects as it is anticipated that the majority of future broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans right-of-way (ROW).

**Table 4-1
EL DORADO COUNTY CUMULATIVE PROJECTS LIST**

No.	Project Name and Location	Project Type	Status
1	Canal Street Bicycle and Pedestrian Improvement Project Phase 1, City of Placerville, CA	Bike and Pedestrian	Approved (June 29, 2004)
2	Combella Road Sidewalk Project, City of Placerville, CA	Bike and Pedestrian	Approved (June 29, 2004)
3	Placerville Drive Bicycle and Pedestrian Facilities, City of Placerville, CA	Bike and Pedestrian	Approved (March 29, 2023)
4	Cameron Park Drive Bike Lanes, Cameron Park, CA	Bike and Pedestrian	Pending
5	Coach Lane Bike Lanes, Cameron Park, CA	Bike and Pedestrian	Pending
6	Country Club Drive Bike Lanes, Cameron Park, CA	Bike and Pedestrian	Pending
7	Diamond Springs Pedestrian Facility Improvements, Diamond Springs, CA	Bike and Pedestrian	Approved (September 11, 2023)
8	El Dorado Trail and Missouri Flat Road Phase 2 Bike/Pedestrian Overcrossing, Diamond Springs, CA	Bike and Pedestrian	Approved (December 14, 2023)
9	Henningsen Park/Lotus Road Class I Multi-Use Trail Improvements, Lotus, CA	Bike and Pedestrian	Pending
10	Jacquier Road Bike Lanes, Smithflat, CA	Bike and Pedestrian	Pending
11	La Canada Drive and Gateway Drive Pedestrian/Bicycle Improvements, Cameron Park, CA	Bike and Pedestrian	Pending
12	Lotus Road Bike Lanes, Lotus, CA	Bike and Pedestrian	Pending
13	Marshall Road Bike Lanes, Garden Valley, CA	Bike and Pedestrian	Pending
14	Meder Road Bike Lanes, Cameron Park, CA	Bike and Pedestrian	Pending
15	Missouri Flat Road Bike Lanes Phase 1 and 2, Diamond Springs, CA	Bike and Pedestrian	Approved (June 23, 2020)
16	Mother Lode Drive Bike Lanes, Diamond Springs, CA	Bike and Pedestrian	Planned

No.	Project Name and Location	Project Type	Status
17	Old Bass Lake Rd – El Dorado Hills to Bass Lake Connection, between El Dorado Hills and US 50, CA	Bike and Pedestrian	Planned
18	Palmer Drive Bike Path Connection, Shingle Springs, CA	Bike and Pedestrian	Planned
19	Pleasant Valley Road Bike Lanes Phase A, between Diamond Springs and Pleasant Valley, CA	Bike and Pedestrian	Planned
20	Ponderosa Road Bicycle and Pedestrian Improvements, Diamond Springs, CA	Bike and Pedestrian	Approved (August 22, 2024)
21	Western Placerville Interchanges Phase 2.3, City of Placerville, CA	Road and Highway Capacity	Approved (August 21, 2024)
22	Bass Lake Road Widening, Cameron Park, CA	Road and Highway Capacity	Approved (October 1, 2018)
23	Cameron Park Drive Widening – Palmer Drive to Sudbury Road, Cameron Park, CA	Road and Highway Capacity	Approved (April 12, 2018)
24	Country Club Drive Extension – Silva Valley Parkway to Tong Road, El Dorado Hills, CA	Road and Highway Capacity	Planned
25	Diamond Springs Parkway – Phase 1B, Diamond Springs, CA	Road and Highway Capacity	Approved (July 1, 2024)
26	US 50/El Dorado Hills Blvd Interchange Phase 2B – Eastbound Ramps, El Dorado Hills, CA	Road and Highway Capacity	Approved (February 26, 2012)
27	White Rock Road Widening – Windfield Way to Sacramento County Line, El Dorado Hills, CA	Road and Highway Capacity	Planned
28	ED 50 Apple Hill Pavement Rehab, along US 50 between Placerville and Pollock Pines, CA	Road Maintenance and Rehabilitation	Planned
29	ED 50 CAPM, along US between Riverton and Strawberry, CA	Road Maintenance and Rehabilitation	Approved (October 22, 2024)
30	ED 50 Echo Summit pavement rehab, along US 50 from Phillips to Meyers, CA	Road Maintenance and Rehabilitation	Planned
31	ED 50 Riverton Drainage rehab, along US 50 from Pollock Pines to Kyburz, CA	Road Maintenance and Rehabilitation	Planned
32	ED 50 Shingle Springs Pavement Rehab, along US 50 from Cameron Park to Shingle Springs, CA	Road Maintenance and Rehabilitation	Planned
33	Placerville CAPM, along US 50 between Five Mile Terrace and Camino, CA	Road Maintenance and Rehabilitation	Approved (October 22, 2024)
34	Route 49 El Dorado County, City of Placerville, CA	Road Maintenance and Rehabilitation	Pending
35	SR 193 Cool Pavement Rehabilitation, along SR 193 between SR 49/SR 193 junction and Pilgram Road, Cool, CA	Road Maintenance and Rehabilitation	Planned
36	SR 193 Georgetown Pavement Rehabilitation, along SR 193 between Georgetown and the City of Placerville, CA	Road Maintenance and Rehabilitation	Planned
37	SR 49 Pavement Rehabilitation Phase A, along SR 49 in Diamond Springs, CA	Road Maintenance and Rehabilitation	Planned
38	SR 49 Pavement Rehabilitation Phase B, along SR 49 from Pilot Hill to Auburn (Placer County), CA	Road Maintenance and Rehabilitation	Planned
39	US 50 Point View Dr Landscape Rehabilitation, along US 50 south of Smithflat, CA	Road Maintenance and Rehabilitation	Planned
40	US 50 Rehab Cambridge Rd to El Dorado Rd, along US 50 between Shingle Springs and Diamond Springs, CA	Road Maintenance and Rehabilitation	Planned

No.	Project Name and Location	Project Type	Status
41	Canal Street Bicycle and Pedestrian Improvement Project Phase 2, City of Placerville, CA	Road Maintenance and Rehabilitation	Pending
42	Clay Street at Hangtown Creek Bridge, City of Placerville, CA	Road Maintenance and Rehabilitation	Pending
43	Placerville Drive at Hangtown Creek Bridge Replacement, City of Placerville, CA	Road Maintenance and Rehabilitation	Planned
44	Bass Lake Road at Bridlewood Roundabout, El Dorado Hills, CA	Road Maintenance and Rehabilitation	Pending
45	Bucks Bar Road/North Fork Cosumnes River Bridge Replacement, Somerset, CA	Road Maintenance and Rehabilitation	Approved (October 30, 2024)
46	El Dorado Hills Boulevard Overlay Project, El Dorado Hills, CA	Road Maintenance and Rehabilitation	Pending
47	Green Valley Road at Mound Springs Creek Bridge Rehabilitation, between Greenstone and US 50, CA	Road Maintenance and Rehabilitation	Approved (May 9, 2018)
48	Mosquito Road/South Fork American River Bridge Replacement, Mosquito, CA	Road Maintenance and Rehabilitation	Approved (February 28, 2020)
49	Mount Murphy Road/South Fork American River Bridge Replacement, Coloma, CA	Road Maintenance and Rehabilitation	Approved (May 19, 2022)
50	Newtown Road/South Fork Weber Creek Bridge Rehab, Newtown, CA	Road Maintenance and Rehabilitation	Approved (December 19, 2018)
51	Oak Hill Road/Squaw Hollow Creek Bridge Replacement, southeast of Diamond Springs	Road Maintenance and Rehabilitation	Approved (January 12, 2017)
52	SR 49/193 Intersection Control Improvements – Roundabout, Cool, CA	Road System Management and Operations	Planned
53	US 50 Broadway Eastbound Exit Signalization and Ramp Lengthening, City of Placerville, CA	Road System Management and Operations	Planned
54	US 50 Trip to Green, City of Placerville, CA	Road System Management and Operations	Pending
55	Wiltse Road Intersection Improvements, City of Placerville, CA	Road System Management and Operations	Planned
56	Clear Creek Road Scour Mitigation, Pleasant Valley, CA	Road Maintenance and Rehabilitation	Approved (November 12, 2019)
57	Cosumnes Mine Bridge, between Happy Valley and Grizzly Flats, CA	Road Maintenance and Rehabilitation	Approved (March 8, 2018)
58	El Dorado Hills Boulevard and Saratoga Way Turn Lanes, El Dorado Hills, CA	Road and Highway Capacity	Approved (October 17, 2022)
59	Enterprise Drive Signalization, Diamond Springs, CA	Road System Management and Operations	Pending
60	Forni Road at Pleasant Valley Road/Hwy 49 Realignment, El Dorado, CA	Road System Management and Operations	Pending
61	Green Valley Road at Indian Creek Bridge Replacement, between Greenstone and US 50, CA	Road Maintenance and Rehabilitation	Approved (May 9, 2018)

No.	Project Name and Location	Project Type	Status
62	Green Valley Road at Loch Way Intersection Improvement Project, El Dorado Hills, CA	Road System Management and Operations	Pending
63	Guardrail Replacement, Mt. Aukum Rd, Cameron Park Drive, Bass Lake Road, Salmon Falls Road, CA	Road Maintenance and Rehabilitation	Planned
64	Hollow Oak Drive at Bass Lake Road Turn Pocket, between El Dorado Hills and Bass Lake Road, CA	Road System Management and Operations	Approved (November 28, 2024)
65	Industrial Drive Signalization and Realignment, Diamond Springs, CA	Road System Management and Operations	Pending
66	Latrobe Connection, El Dorado Hills, CA	Road System Management and Operations	Pending
67	Robert J. Mathews Parkway at Golden Foothill Parkway Roundabout, El Dorado Hills, CA	Road System Management and Operations	Pending
68	US 50/Ponderosa Road Interchange Phase 1A - North Shingle Road Realignment, Shingle Springs, CA	Road System Management and Operations	Planned
69	US 50/Ponderosa Road Interchange Phase 1B - Durock Road Realignment, Shingle Springs, CA	Road System Management and Operations	Planned
70	Wentworth Springs Road Pavement Rehabilitation, Eldorado National Forest, southwest of Loon Lake, CA	Road Maintenance and Rehabilitation	Approved (August 22, 2019)
71	Apache Avenue/US Highway 50 Intersection Improvement Project, Meyers, CA	Road System Management and Operations	Approved (March 11, 2022)
72	Pioneer Trail/US Highway 50 Intersection Safety Improvement Project, City of South Lake Tahoe, CA	Road System Management and Operations	Approved (February 18, 2021)
73	Fallen Leaf Road Pavement Rehabilitation Project, Fallen Leaf, CA	Road Maintenance and Rehabilitation	Pending
74	Lake Tahoe Boulevard Class 1 Bicycle Trail, City of South Lake Tahoe, CA	Bike and Pedestrian	Approved (July 2, 2021)
75	San Bernardino Class I Bike Trail Project, Meyers, CA	Bike and Pedestrian	Approved (March 25, 2022)
76	Apache Avenue Pedestrian Safety and Connectivity Project, Meyers, CA	Bike and Pedestrian	Approved (March 11, 2022)
77	Meeks Creek Bridge Replacement Project, Meeks Bay, CA	Road Maintenance and Rehabilitation	Pending
78	South Tahoe CAPM, City of South Lake Tahoe, CA	Road Maintenance and Rehabilitation	Approved (July 1, 2024)

Source: El Dorado County

The following provides a summary of the basis for the cumulative impact analysis for each impact area:

- **Aesthetics:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly have a substantial adverse effect on a scenic vista, substantially damage scenic resources, degrade

existing character or public views, or create a new source of substantial light or glare. With implementation of Mitigation Measure AES-1, no significant cumulative impact would result from the Project in conjunction with the development of other cumulative projects.

- **Agriculture and Forestry Resources:** Cumulative impacts would occur when the proposed project, in combination with other projects or plans/projects in El Dorado County, would directly or indirectly result in the conversion of Important Farmland to nonagricultural use, conflict with existing zoning for agricultural or forest use, or result in the loss of agricultural or forest land to non-agricultural or non-forest uses. The potential for cumulative impacts related to agriculture and forestry resources is not cumulatively significant, and no cumulative impacts would result from the Project in conjunction with the development of other cumulative projects.
- **Air Quality:** The cumulative air quality setting is the Mountain Counties Air Basin (MCAB) and the Lake Tahoe Air Basin (LTAB) and their anticipated growth. The western portion of El Dorado County, within the MCAB, is designated as nonattainment for Ozone and PM₁₀ with respect to the California Ambient Air Quality Standards (CAAQS) and is designated as nonattainment for Ozone (8-hour) and PM_{2.5} with respect to National Ambient Air Quality Standards (NAAQS). The portion of El Dorado County within the LTAB is designated as nonattainment for Ozone, PM₁₀, and CO with respect to the CAAQS and is designated as nonattainment for Ozone (8-hour) with respect to NAAQS. Thus, for this cumulative analysis, the MCAB, LTAB, and the regions that affect air quality within El Dorado County define the geographic context. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards in the MCAB or LTAB. Instead, a project's individual emissions of criteria pollutants and precursors contribute to existing cumulatively significant adverse air quality impacts in the El Dorado County Air Quality Management District (EDCAQMD). The EDCAQMD establishes thresholds designed to help the basin achieve state ambient air quality standards; therefore, because the proposed Project would not exceed those thresholds, the cumulative impact related to air quality is not significant. However, any activities associated with plans for grading and construction would require a Fugitive Dust Mitigation Plan, as required under Mitigation Measure AQ-1. Additionally, some areas of the County contain Naturally Occurring Asbestos (NOA). Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered. With implementation of Mitigation Measures AQ-1 and AQ-2, no significant cumulative impact would result from the Project in conjunction with the development of other cumulative projects.
- **Biological Resources:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projects in El Dorado County, would directly or indirectly result in an adverse impact to a special-status species, result in an adverse effect on a natural community, result in an adverse effect to wetlands, interfere with the movement of wildlife, conflict with local policies or ordinances protecting biological resources, or conflict with a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). Although impacts to biological resources are site specific, project specific impacts contribute to a continued loss of biological resources throughout the range of the species or other biological resource being impacted. The projects listed as part of this cumulative analysis would also be subject to CEQA review and would be required to comply with any mitigation measures identified as necessary to reduce potential impacts to biological resources. Therefore, with implementation of Mitigation Measures BIO-1 through BIO-3, the Project is not expected to

make a cumulatively considerable contribution to losses of sensitive biological resources in El Dorado County.

- **Cultural Resources:** Cumulative cultural resource impacts may occur when the proposed Project, in combination with other projects or plans/projects in El Dorado County, would directly or indirectly lead to the loss of historically or archaeologically significant type of site, building, deposit, or tribal cultural resource. For example, while the loss of a single historic building may not be significant to the character of a neighborhood or streetscape, continued loss of such historical resources on a project-by-project basis could amount to a significant cumulative effect. With the implementation of Mitigation Measures CUL-1 and CUL-2, the proposed Project would have a less than significant impact on unknown cultural resources. However, the analysis of cumulative impacts to cultural resources is based on impacts of the proposed Project plus the other cumulative projects in the County. As such, each cumulative project that would be subject to CEQA would be required to assess its potential impacts to cultural resources. Mitigation measures conducted for each cumulative individual fiber project would ensure that impacts to cultural resources are minimized to the maximum extent feasible. Therefore, with implementation of Mitigation Measures CUL-1 and CUL-2, and the requirement for the other cumulative projects subject to CEQA to adopt similar measures, no cumulatively considerable impact to cultural resources would occur with approval of the proposed Project.
- **Energy:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would result in the wasteful or inefficient use of energy. The projects listed as part of this cumulative analysis include various transportation projects in the County. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would not typically involve substantial ongoing energy use during operation. No significant cumulative impact related to energy would result from the Project in conjunction with the development of other cumulative projects.
- **Geology and Soils:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly cause adverse effects involving fault rupture, strong seismic ground shaking, seismic-related ground failure, or landslides; result in soil erosion or the loss of topsoil; be located on unstable soil that could result in landslide, lateral spreading, subsidence, liquefaction, or collapse; be located on expansive soil; have soils incapable of adequately supporting septic tanks; or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The context for analyzing cumulative impacts to geological and soils resources is limited to the immediate area of geologic constraint, with the exception of some geologic impacts that are regional such as earthquake risk. No significant cumulative impact related to geology and soils would result from the Project in conjunction with the development of other cumulative projects.
- **Greenhouse Gas Emissions:** Greenhouse gas (GHG) emissions are inherently a cumulative concern, in that the significance of GHG emissions is determined based on whether such emissions would have a cumulatively considerable impact on global climate change. Although the geographic scope of cumulative impacts related to GHG emissions is global, this analysis focuses on the State, the region, and the proposed Project's direct and/or indirect generation or offset of GHG emissions. The EDCAQMD has not established GHG thresholds of significance or other guidance for determining the significance of a land use development project's GHG

impacts. For short-term construction GHG emissions, the guidance and threshold of significance from the Sacramento Metropolitan Air Quality Management District (SMAQMD) were used. SMAQMD establishes GHG efficiency emissions thresholds designed to determine significance for GHG analyses in CEQA documents based on the individual fiber project's anticipated operational year. Construction related emissions would be temporary and short term and would be significantly reduced to negligible levels once construction has ceased. Therefore, because the proposed Project would not exceed those thresholds, the cumulative impact related to GHG emissions is not significant. No significant cumulative impact related to GHG emissions would result from the Project in conjunction with the development of other cumulative projects.

- **Hazards and Hazardous Materials:** The cumulative setting for hazards and hazardous materials impacts is generally site-specific and depends on past, present, and future uses and existing soil, sediment, and conditions. Hazards and hazardous materials impacts may be related to the transport, use, or disposal of hazardous materials; exposure to wildland fires; proximity to airports; and the potential to impair emergency response or evacuation plans. Existing regulations specify mandatory actions related to the transport, use, and disposal of hazardous materials must occur during construction and operation of individual fiber projects, which would adequately address issues pertaining to hazards and hazardous materials. With implementation of Mitigation Measure AQ-2 and Mitigation Measure TRA-1, no significant cumulative impact related to hazards and hazardous materials would result from the Project in conjunction with the development of other cumulative projects.
- **Hydrology and Water Quality:** Cumulative impacts related to hydrology and water quality would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, substantially degrade groundwater supplies or interfere substantially with groundwater recharge, substantially alter the existing drainage pattern of the site in a manner which would cause negative environmental effects, increase the risk release of pollutants in flood hazard, tsunami, or seiche zones, or conflict with or obstruct implementation of a water quality control plan or groundwater management plan. Existing regulations specify mandatory actions that must occur during construction and operation of individual fiber projects, which would adequately address the potential for construction or operation of individual fiber projects to affect water resource. No significant cumulative impact related to hydrology and water quality would result from the Project in conjunction with the development of other cumulative projects.
- **Land Use and Planning:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly physically divide an established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No significant cumulative impact related to land use and planning would result from the Project in conjunction with the development of other cumulative projects.
- **Mineral Resources:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would result in the loss of a known mineral resource or a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. The geographic context

for the analysis of cumulative impacts to mineral resources is the extent of the County, and immediately adjacent areas to the extent of the mineral resource. No significant cumulative impact related to mineral resources would result from the Project in conjunction with the development of other cumulative projects.

- **Noise:** Cumulatively considerable impact would occur if Project construction noise or construction vibration combined with construction noise and vibration from other cumulative projects or plans/projections in the County to affect the same noise sensitive land uses (NSLU). The exact alignment and timing of the future broadband infrastructure is currently unknown. However, there is the potential that some of the locations for future Project components could coincide in location and time with other construction projects resulting in potentially cumulatively considerable impacts. Other cumulative projects in the County would also be subject to CEQA review and would be required to comply with any mitigation measures identified as necessary to reduce potential noise and vibration impacts. Implementation of Mitigation Measures NOI-1 through NOI-3 would ensure that the Project's contribution to combined construction noise and vibration would be less than cumulatively considerable.
- **Population and Housing:** Cumulative impacts would occur when the proposed Project, in combination with other projects and plans/projections in El Dorado County, would directly or indirectly induce substantial population growth in an area or displace people or housing and necessitate the construction of replacement housing elsewhere. None of the cumulative projects, in combination with the proposed Project, would directly or indirectly induce substantial population growth. Therefore, the Project would not contribute to a cumulatively considerable impact related to population and housing.
- **Public Services:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities. Potential impacts to public services are evaluated on the level at which that public service is provided, which may be regional or more localized depending on the service. None of the cumulative projects included in this analysis, in combination with the proposed Project, would directly or indirectly induce substantial population growth. No cumulatively considerable impact associated with public services would occur with approval of the proposed Project.
- **Recreation:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would result in an increased use of parks and recreational facilities such that substantial physical deterioration of the facility would occur, or if the projects would include the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Potential impacts to recreation are evaluated at the regional level. As discussed above, the proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse impact on the environment. The proposed Project would have no impact on recreational facilities and would not contribute to a cumulatively considerable impact.
- **Transportation:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly have a

substantial adverse effect on transportation, vehicle miles traveled (VMT), and circulation. The vast majority of the cumulative transportation projects included in this analysis involve existing transportation infrastructure, as such, construction activities may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services. However, implementation of Mitigation Measure TRA-1 would reduce potentially significant traffic impacts from construction of individual fiber projects along ROW to less than significant. Operation of the proposed Project would introduce a wider and more reliable network that would benefit communications to emergency services. The Project would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. Therefore, with implementation of Mitigation Measure TRA-1, no cumulatively considerable impact associated with transportation would occur with approval of the proposed Project.

- **Tribal Cultural Resources:** Cumulative tribal cultural resource (TCR) impacts may occur when a series of actions leads to the loss of historically or archaeologically significant type of site, building, deposit, or tribal cultural resource. For example, while the loss of a single historic building may not be significant to the character of a neighborhood or streetscape, continued loss of such historic resources on a project-by-project basis could amount to a significant cumulative effect. With implementation of Mitigation Measures TCR-1 and TCR-2 for tribal consultation, the proposed Project would have less than significant impacts on unknown TCRs. Therefore, with implementation of Mitigation Measures TCR-1 and TCR-2, no cumulatively considerable impact to tribal cultural resources would occur with approval of the proposed Project.
- **Utilities and Service Systems:** Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in the County, would require or result in the construction of new or expanded utilities, have insufficient water supplies to serve the projects, result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand, generate solid waste in excess of local capacity, or not comply with federal, State, and local solid waste regulations. Potential impacts to utilities and service systems are evaluated on the level at which the service is provided, which may be Countywide or more local depending on the service. Individual fiber projects under the Project would not require potable water and no wastewater would be generated from construction or operation of individual fiber projects. Therefore, no expanded stormwater facilities are required. Installation of the fiber optic lines would not require the use of electricity or natural gas for construction or operation. Construction under the Project would generate minimal waste, which would comply with the State's waste diversion requirements and would not exceed infrastructure capacity. No cumulatively considerable impact associated with utilities and service systems would occur with approval of the proposed Project.
- **Wildfire:** The areas considered for cumulative impacts related to wildfire are the State Responsibility Areas (SRAs), which include the Project area and other cumulative projects or plans/projections. Implementation of the proposed Project would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. With implementation of Mitigation Measure TRA-1, no cumulatively considerable impact associated with transportation would occur with approval of the proposed Project.

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4.1 AESTHETICS

This section describes the regulatory framework and existing conditions related to aesthetics and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on aesthetics were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to aesthetics.

4.1.1 Environmental Setting

4.1.1.1 Overview of Visual Resources Concepts

Aesthetic/visual resources are defined as the natural and man-made elements and features of the landscape that contribute to the visual character and quality of a setting. Because a viewer observes the visual environment as a whole and not one object at a time, the viewer's perception of that environment is based on the visual character of objects and the relationships between them. Visual characters are descriptive; it is the order and combination of patterns that are created by visual elements in a scene. The fundamental pattern elements used to describe visual character are form (in terms of bulk, mass, size, and shape), line, color, and texture, and the appearance of a landscape is described according to the dominance of these elements.

Visual quality is evaluated according to the vividness, intactness, and unity present in the viewshed. These criteria for evaluating visual quality can be defined as follows:

- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.
- **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements.
- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole.

An individual's perception and enjoyment of a view can vary with each individual fiber project. The visual experience of the viewer is a combination of the visual resources in the landscape and the viewer's response to what is seen. Viewer response, or awareness, is composed of two elements: viewer sensitivity and viewer exposure. Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Viewer exposure is the degree to which viewers are exposed to a view or visual resource. Viewer exposure varies based on the physical location of the viewer and the distance and position of the viewer in relation to the resource, the number of viewers of the resource, and the duration and frequency of the view. A viewer's response is also affected by the degree to which they are receptive to the visual details, character, and quality of the surrounding landscape.

Visual Character and Quality

Visual character, visual quality, form, line, texture, and other terms are used throughout this discussion to assess the visual impacts of the proposed Project. These terms, as defined by the U.S. Department of Transportation (DOT), are briefly discussed below.

Visual Character: The description of the visible attributes of a scene or object typically using artistic terms such as form, line, color, and texture.

Visual Quality: What viewers like and dislike about visual resources that compose the visual character of a particular scene. Different viewers may evaluate specific visual resources differently based on their interests in natural harmony, cultural order, and project coherence. Neighbors and travelers may, in particular, have different opinions on what they like and dislike about a scene. The rating for visual quality is described below:

- **High** – Views are perceived to be harmonious, orderly, or coherent and desirable visual resources are a dominant component of the view.
- **Moderately High** – Views may be perceived as largely harmonious, orderly, or coherent. Undesirable visual resources may be present but are few in number. Desirable visual resources are generally present and may be a dominant component of the view.
- **Moderate** – Views may be perceived as fairly harmonious, orderly, or coherent. Undesirable visual resources may be present but do not dominate the view. Desirable visual resources may also be present.
- **Low** – Views may be perceived as inharmonious, disorderly, or incoherent, and undesirable visual resources are generally present.

Natural Harmony: What a viewer likes and dislikes about the natural environment. The viewer labels the visual resources of the natural environment as being either harmonious or inharmonious. Harmony is considered desirable; disharmony is undesirable.

Cultural Order: What a viewer likes and dislikes about the cultural environment. The viewer labels the visual resources of the cultural environment as being either orderly or disorderly. Orderly is considered desirable; disorderly is undesirable.

Viewer Sensitivity: The degree to which viewers are sensitive to changes in the visual character of visual resources. It is the consequence of two factors, viewer exposure and viewer awareness.

Viewer Exposure: Viewer exposure is a measure of proximity (the distance between viewer and the visual resource being viewed), the extent (the number of viewers viewing), and duration (how long a time visual resources are viewed). The greater the exposure, the more viewers will be concerned about visual impacts.

Viewer Awareness: Viewer awareness is a measure of attention (level of observation based on routine and familiarity), focus (level of concentration), and protection (legal and social constraints on the use of visual resource). The greater the attention, the more viewers will be concerned about visual impacts.

Form: The unified mass or shape of an object that often has an edge or outline and can be defined by surrounding space. For example, a high-rise building would have a highly regular, rectangular form, whereas a hill would have an organic, mounded form.

Line: Perceived when there is a change in form, color, or texture, and where the eye generally follows this pathway because of the visual contrast. For example, a city's high-rises can be seen silhouetted

against the blue sky and be seen as a skyline, a river can have a curvilinear line as it passes through a landscape, or a hedgerow can create a line where it is seen rising up against a flat agricultural field.

Texture: The perceived coarseness of a surface that is created by the light and shadow relationship over the surface of an object. For example, a rough surface texture (e.g., a rocky mountainside) would have many facets resulting in a number of areas in light and shadow, and gradual gradations between light and shadow.

Project Coherence: What a viewer likes and dislikes about the project environment. The viewer labels the visual resources of the project environment as being either coherent or incoherent. Coherent is considered desirable; incoherent is undesirable.

Light and Glare

Light pollution refers to all forms of unwanted light in the night sky including glare, light trespass, sky glow, and over-lighting. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space, such as many of the communities in El Dorado County (County) and the cities of Placerville and South Lake Tahoe. Excessive light and glare can also be visually disruptive to humans and nocturnal animal species. Electric lighting also increases night sky brightness and is the human-made source of sky glow. Sky glow is highly variable depending on immediate weather conditions, quantity of dust and gas in the atmosphere, amount of light directed skyward, and the direction from which it is viewed.

4.1.1.2 Regulatory Framework

The proposed Project is subject to federal, State, regional, and local environmental laws and policies applicable to the protection of visual resources, as well as plans and policies that ensure adequate consideration is given to preserving and/or enhancing the visual qualities of an area.

Federal Regulations

National Scenic Byways Program

The National Scenic Byways program is part of the U.S. DOT, Federal Highway Administration. The program was established under the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized in 1998 under the Transportation Equity Act for the 21st Century. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities.

State Regulations

California Scenic Highway Program

In 1963, the State Legislature established the California Scenic Highway Program through Senate Bill 1467. It is managed by the California Department of Transportation (Caltrans) Landscape Architecture Division. The intent of the program is to establish the State's responsibility for the protection and enhancement of California's natural scenic beauty by identifying those portions of the State highway system which, together with adjacent scenic corridors, require special conservation treatment. Scenic corridors consist of land that is visible from, adjacent to, and outside of the highway right-of-way, and is

comprised primarily of scenic and natural features. The designation provides benefits to scenic resources along the highway, some of which include protection from incompatible uses, mitigation of activities within the designated corridor that detract from the highway's scenic quality, and preservation of hillsides. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. Under the significance criteria established by CEQA, projects are evaluated for visibility from State Scenic Highways.

California Building Code

Title 24 in the California Code of Regulations is the California Building Standards Code. Part 6 of Title 24 is the California Energy Code, which includes standards for lighting to improve energy efficiency and reduce light pollution and glare by regulating light power, brightness, and sensor controls.

Part 11 of Title 24 is the California Green Building Standards Code, known as CALGreen. CALGreen establishes building standards aimed at enhancing the design and construction of buildings through the use of building concepts that have a reduced negative impact or positive environmental impact. CALGreen encourages sustainable construction practices and includes standards for planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. Section 5.106.8, Light Pollution Reduction, specifically establishes Backlight, Uplight, and Glare ratings to minimize the effects of light pollution for non-residential development. The standards for lighting are updated on a three-year basis, and have varying requirements according to lighting zones, established by the location of a project. The standards contain lighting power (i.e., maximum zonal lumens) allowances for newly installed equipment and specific alterations that are dependent on the designated lighting zone. Rural areas are designated lighting zone 2 which requires more stringent regulation of outdoor lighting systems lighting power. The allowed lighting power is based on the brightness of existing lighting in the surrounding area. Providing greater power than is needed potentially leads to debilitating glare on adjacent properties.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances may apply to the Project:

Chapter 33, *Grading and Construction*, sets standards for grading, including requirements for special information reports and plans to inform the grading and construction process in certain situations, plus standards for tree and vegetation protection during construction.

Chapter 37, *Height*, establishes height standards to ensure visually compatible development as required under Goal 2, Policy 1.B, of the Community Design Subelement, Land Use Element, of the Goals and Policies. “Visual compatibility” is determined by compliance with the requirements of this chapter.

Chapter 38, *Signs*, implements regional outdoor advertising regulations to protect property values, create a more attractive economic and business climate, enhance the aesthetic appearance of the physical community, preserve scenic and natural beauty, and provide an enjoyable and pleasing community in accordance with the Community Design Subelement of the Land Use Element and related elements of the Goals and Policies. It is further intended to reduce signs or advertising distractions and obstructions that may contribute to traffic accidents. Temporary signs for temporary uses may be allowed as part of a temporary use approval. Standards for temporary signs associated with temporary uses shall be the applicable standards of the plan area in which the temporary use is located as set forth in Sections 38.5 through 38.10, inclusive. All temporary signs shall comply with the general sign standards in Section 38.4. Temporary signs that are approved as part of a temporary use shall be removed when the permit for the temporary use expires.

Chapter 66, *Scenic Quality*, ensures that projects are designed and constructed consistent with the Community Design Subelement of the Land Use Element and related elements of the Goals and Policies.

The Shorezone Subelement, Conservation Element of the Goals and Policies identifies special qualities, including physical, biological and visual, that shall be considered when reviewing a project in the shorezone or lakezone. In accordance with those policies, Chapter 80, *Review of Projects in the Shorezone and Lakezone*, sets forth findings that must be made by TRPA prior to approving a project in the shorezone or lakezone. All projects and activities in lagoons or the shorezone or lakezone of any lake in the Region shall comply with the provisions of this chapter.

TRPA Regional Plan

Aesthetics are addressed within the Scenic Subelement of the *Conservation Element* of the TRPA Regional Plan (TRPA 2024b). The Scenic Subelement contains the following goals and policies that apply to the Project:

- **Goal SR-1: Maintain and Restore the Scenic Qualities of the Natural Appearing Landscape.** As with many of the Region's natural resources, the scenic qualities of the Region are vulnerable to change. Modifying the natural scenic features of the Region is a by-product of development, but such impacts can be minimized and mitigated. A coordinated effort that incorporates architectural design and location considerations in plan development and the project review process is a useful means for promoting scenic and aesthetic values. Policies to achieve this goal are consistent with the adopted environmental thresholds.
 - **Policy SR-1.2:** Any development proposed in areas targeted for scenic restoration or within a unit highly sensitive to change shall demonstrate the effect of the project on the 1982 Travel Route Ratings of the Scenic Thresholds. Projects proposed in areas sensitive to scenic degradation shall be analyzed to ensure that the scenic quality of the area is maintained or improved.

TRPA Scenic Quality Improvement Program

The Scenic Quality Improvement Program (SQIP) developed in 1988 as a part of the Regional Plan to provide a program for implementing physical improvements to the built environment in the basin in order to assist in the attainment of scenic quality thresholds. The program specifically addresses scenic resources for the 23 roadway and 4 shoreline landscape units that do not meet scenic quality thresholds. This includes roadway units 1 (Tahoe Valley), 32 (Casino Area), 33 (The Strip), 35 (Al Tahoe), 36 (Airport Area), and 45 (Pioneer Trail North) that are within the Planning Area (City of South Lake Tahoe 2010). The SQIP has not been updated since its adoption in 1988.

Local Regulations

El Dorado County Code

Chapter 130.34 provides standards that are consistent with prudent safety practices for the elimination of excess nighttime light and glare. Outdoor lighting criteria for lighting practices and systems are contained in the adopted Outdoor Lighting Standards. Temporary outdoor lighting that is designed to eliminate glare and minimize light pollution as much as possible in compliance with this Chapter shall be exempt from the provisions of this Chapter. To qualify for this exemption a completed application form for an Administrative or Temporary Use Permit and a site plan shall be provided.

Chapter 130.36 establishes sign regulations that are consistent with the goals, objectives and policies of the El Dorado County General Plan and the County's visual and aesthetic goals and provide adequate identification for establishments. Specifically, this Chapter regulates the size, quantity, and location of signs to maintain and enhance the visual appearance of the County, regulates the location, number and size of highway signs and, to the extent allowable by law, eliminates billboards along identified scenic and historic routes. The *Sign Ordinance* shall include design review for signs within the foreground and background of the designated scenic corridors commensurate with the goal of scenic corridor viewshed protection.

Chapter 130.40.130 provides for the orderly development of commercial and private wireless communication facilities including transmission and relay towers, dishes, antennas, and other similar facilities. The County Board of Supervisors finds that minimizing the number of communication facilities through co-locations on existing and new towers and siting such facilities in areas where their potential visual impact on the surrounding area is minimized will provide an economic benefit and will protect the public health, safety and welfare.

El Dorado County General Plan

Aesthetics are addressed within the *Land Use Element* of the County General Plan. The *Land Use Element* contains the following goals, objectives, policies, and implementation measure that apply to the Project (County 2019):

- **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.
 - **Objective 2.3.2: Hillsides and Ridge Lines.** Maintain the visual integrity of hillsides and ridge lines.
 - **Policy 2.3.2.1:** Disturbance of slopes 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:** Identification of scenic and historical roads and corridors.
 - **Policy 2.6.1.5:** All development on ridgelines shall be reviewed by the County for potential impacts on visual resources. Visual impacts will be assessed and may require methods such as setbacks, screening, low-glare or directed lighting, automatic light shutoffs, and external color schemes that blend with the surroundings in order to avoid visual breaks to the skyline.
- **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.
- **Implementation Measure LU-E:** Review and identify needed revisions to the *County of El Dorado Design and Improvements Standards Manual*. [Policy 2.3.2.1]

City of Placerville City Code

Section 10-4-16 regulates lighting to balance the safety and security needs for lighting with the City of Placerville's desire to preserve the nighttime skyline and to ensure that light trespass and glare have a negligible impact on surrounding property, especially residential. Temporary construction lighting is exempt from the requirements of this section provided such lighting is temporary and is discontinued immediately upon completion of construction work.

Section 10-4-17 provides minimum standards to safeguard life, health, property, and the public welfare in keeping with the unique aesthetic and historic character of the City of Placerville by regulating and

controlling the size, height, design, quality of materials, construction, location, electrification, and maintenance of all permanent and temporary exterior signs and sign structures.

City of Placerville General Plan

Aesthetics are addressed within *Section V – Natural, Cultural, and Scenic Resources* and *Section VII – Community Design* of the City General Plan (City of Placerville 2004).

The *Natural, Cultural, and Scenic Resources* section contains the following goals and policies that apply to the Project (City of Placerville 2004):

- **Goal D:** To protect the City of Placerville’s natural vegetation and diverse wildlife.
 - **Policy 3:** New development shall be sited to protect native tree species, riparian vegetation, important concentrations of natural plants, and important wildlife habitat, to minimize visual impacts and to provide for continuity of wildlife corridors.
- **Goal I:** To protect and enhance the City of Placerville’s community character and scenic resources.
 - **Policy 7:** The City of Placerville shall protect the visual character of scenic street and highway corridors.

The *Community Design* section contains the following goals and policies that apply to the Project (City of Placerville 2004):

- **Goal A:** To preserve and enhance the overall visual attributes of the City of Placerville.
 - **Policy 6:** The City of Placerville shall maintain and/or enhance the visual character of scenic street and highway corridors.
- **Goal E:** To upgrade the visual quality of the U.S Highway (U.S.) 50 corridor and to better integrate the highway into the City of Placerville’s overall community design framework.
 - **Policy 3:** The City of Placerville shall endeavor to maintain natural land features and vegetation along Highway 50 by promoting high quality construction within the adjacent Highway 50 corridor.
 - **Policy 4:** The City of Placerville shall promote the enhancement and visual distinctiveness of Highway 50 entrances to Placerville on the west and east

City of South Lake Tahoe City Code

Chapter 6.10.190 establishes standards regulating development within scenic highway corridors. All projects which are within the scenic highway corridors, as defined by the TRPA, of U.S. 50, 89 and Pioneer Trail shall meet design standards listed below:

- **Standard:** All new electrical lines which operate at 32 kilovolts or less, including service connection lines, shall be placed underground. Exceptions to this requirement will be based on

the city finding that undergrounding would produce a greater environmental impact than above-ground installation. When new electrical lines are permitted to be installed above ground, the new lines, poles and hardware shall be screened from view of the scenic highway to the maximum extent possible.

- Standard: All new communication lines including telephone lines, cable television lines, and service connection lines shall be placed underground. Exceptions to this requirement will be based on the city finding that undergrounding would produce a greater environmental impact than above-ground installation. When new communication lines are permitted to be installed above ground, the new lines, poles, and hardware shall be screened from view of the scenic highway to the maximum extent possible.
- Standard: See also standards for street right-of-way improvements.
- Standard: TRPA Code Section 30.13 development standards for rural transitional corridors shall apply to the applicable sections of Pioneer Trail.

Chapter 6.75 establishes design standards for wireless facilities on private property, including standards for towers, which may be disguised as monopines. The following provisions shall be applied to an application for a monopine:

- Shape and Branching. Monopines shall be gradually tapered from bottom to top to resemble the natural conical pine-tree shape, with shorter branches at the top and wider branches at the bottom. All monopines shall include a “crown” or “topper” installed above the monopole to create a natural point at the top. Branches shall begin at no greater than 15 feet above ground level and maintain at least three and one-half branches per vertical foot when averaged between the bottom-most branch and the highest point on the monopole (excluding any “crown” or “topper” installed above the monopole).
- Bark Cladding. The entire tower above any fence line shall be fitted with faux-pine bark cladding, painted or colored with browns or other appropriate earth tones to mimic natural pine bark.
- Equipment Concealment. All antennas, accessory equipment, cross arms, hardware, cables and other attachments to the monopine must be painted or colored with flat greens, browns or other appropriate earth tones to blend into the faux pine branches. All antennas, remote radio units, tower-mounted amplifiers and other similar equipment larger than one cubic foot shall be fitted with a faux-pine “sock” with faux-pine needles. No tower-mounted equipment shall be permitted to protrude beyond the branch canopy such that it would materially alter the tapered pine shape.
- Material Selection and Approval. All materials and finishes used to conceal the monopine shall be subject to prior approval by the department. Applicants shall use only high-quality materials to conceal the wireless facility. The applicant shall use color-extruded plastics for elements such as the faux-pine needles and faux-bark cladding to prolong the like-new appearance and reduce fading caused by exposure to the sun and other weather conditions.

City of South Lake Tahoe General Plan

Aesthetics are addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goal and policy that apply to the Project:

- **Goal NCR-1:** To protect and enhance the visual connection of the City of South Lake Tahoe's and the Lake Tahoe Basin's scenic resources.
 - **Policy NCR-1.4: Views of Lake Tahoe.** The City of South Lake Tahoe should ensure that views of Lake Tahoe from vantage points along public streets or public areas are not to be blocked by development. Any impairment or partial obstruction of these views from new development shall be the minimum necessary to allow reasonable development.

4.1.1.3 Methodology

Because scenic corridors are a key part of this analysis and because roadways are a publicly accessible location for the local viewshed, the aesthetic analysis generally utilized terminology and steps outlined in the publication, *Guidelines for the Visual Impact Assessment of Highway Projects* (U.S. Department of Transportation 2015).

The steps outlined below were followed to assess visual impacts:

1. Establish the study area.
2. Examine visual quality.
3. Analyze impacts on visual quality.
4. Determine mitigation and enhancement measures.

To analyze the aesthetic impact of the proposed Project, a qualitative approach was taken to determine the current visual quality and character of the program site and surrounding areas and to identify any impacts that may result from implementation of the Project.

4.1.1.4 Existing Conditions

Regional Visual Character

El Dorado County is located in the foothills of the northern Sierra Nevada and features a broad range of landscapes that change with the gradual increase in elevation. Elevations range from 200 feet in the western rolling foothills, adjacent to Sacramento County, to more than 10,000 feet along the Sierra Nevada crest on the edge of the Lake Tahoe Basin. The discovery of gold in Coloma sparked the California Gold Rush in 1848, resulting in "boom towns" throughout the Sierra Nevada foothills in an area now known as Gold Country. The diverse environments of the region are represented by distinct natural communities and landforms that display different development patterns and historical features. This broad 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 (County 2003).

The visual environment of the western slope of the County is characterized by 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. The mountain conditions in the Lake Tahoe Basin are a visually dominant feature in the eastern portion of the County.

Scenic Vistas

Caltrans maintains an inventory of approximately 146 scenic vistas in the State, which provide informal pullout areas along roadways where motorists can park and safely view scenery. Of these, two are located in the eastern portion of El Dorado County. The Emerald Bay/Vikingsholm Vista Point is located along SR 89 at postmile 17.3 and overlooks Emerald Bay, Lake Tahoe. The Christmas Valley Vista Point is located along SR 89 at postmile 5.6, and provides views of forested landscapes, meadows, and the surrounding mountains (Caltrans 2024b). Figure 4.1-1, *State Scenic Highways and Scenic Vistas*, shows the scenic vistas maintained by Caltrans within the County.

State Scenic Highways

The State Scenic Highway System list is codified in the California Streets and Highways Code. A highway may be designated as scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. An eligible State highway becomes officially designated through a process in which the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a State Scenic Highway by the Caltrans Director. Discussed further below, El Dorado County has two designated State Scenic Highways, U.S. 50 and SR 89, and SR 49 is eligible for designation. Additionally, portions of SR 88 traverses the Amador-El Dorado county line and is a designated State Scenic Highway. Figure 4.1-1 shows the designated and eligible State Scenic Highways in the County.

U.S. 50 traverses the entire County from the Sacramento County line to the Nevada state line. A 58-mile segment of U.S. 50 is a designated State Scenic Highway from the Government Center Interchange in the City of Placerville to the City of South Lake Tahoe city limit. Often steep and mountainous, this scenic route runs from the suburban foothills of the Sierra Nevada through the American River Canyon, over the granite peaks of Echo Summit, then descends to the Tahoe Basin with spectacular views of Lake Tahoe (Caltrans 2024a). Additionally, the segment of U.S. 50 from the City of South Lake Tahoe to the Nevada state line is eligible for designation as a State Scenic Highway (Caltrans 2024c).

SR 89 traverses the eastern portion of El Dorado County in the Lake Tahoe Basin from Placer County in the north to Alpine County in the South and intersects with U.S. 50 at “The Y”. A 27-mile portion of SR 89, known as Lake Tahoe Road, is a designated State Scenic Highway (County 2024c). This mountainous road travels along alpine forests and meadows, with spectacular views of mountain ranges and peaks. The northern portion overlooks Lake Tahoe (Caltrans 2024a).

SR 88, also known as the Carson Pass Highway, travels east-west from Stockton to the Nevada state line. Although SR 88 is located within the jurisdiction of Caltrans District 10 (which includes Alpine, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne counties), portions of it travel along the Amador-El Dorado county line. Along this boundary, a 33.5-mile segment of SR 88 is a designated State Scenic Highway (Caltrans 2024c).

SR 49 traverses the western slope of El Dorado County from Placer County in the north to Amador County in the south. All of SR 49 is eligible for designation as a State Scenic Highway (Caltrans 2024c).

Lake Tahoe

Lake Tahoe is a designated Outstanding National Resource Water (ONRW) under federal antidegradation regulations and is renowned for its extraordinary clarity, purity, and deep blue color. Only three bodies of water have the ONRW designation in the western United States: Lake Tahoe and Mono Lake in California, and Crater Lake in Oregon. Much of the beauty of the lake comes from its extraordinary transparency and related deep blue color (City of South Lake Tahoe 2010).

Wild and Scenic Rivers

Other scenic resources in the County include rivers and streams, which are important visual resources that draw tourists to the area for recreational opportunities (County 2003). The American, Cosumnes, Rubicon, and Upper Truckee rivers run through the County. Additionally, natural open space corridors associated with stream environment zones (SEZ) of the Upper Truckee River, Trout Creek, Heavenly Valley Creek, and Bijou Creek consist of natural creek and meadow landscape conditions (City of South Lake Tahoe 2010).

The National Wild and Scenic Rivers System (NWSRS) was created by Congress in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Although there are numerous rivers and streams in the County, there are no officially designated Wild and Scenic Rivers, although portions of the American River outside of the County have such designations (NWSRS 2024).

Existing Viewer Sensitivity, Viewer Groups, Viewer Exposure, and Viewer Awareness

The viewer groups within El Dorado County include residents, cyclists, motorists, and recreationists. For residents, viewer sensitivity is high due to their long-term, constant presence in the area and the moderate to high visual quality of the surrounding scenery. It is also presumed that these viewer groups were drawn to the County, in part, because of the viewshed, although motorists/cyclists may travel the area's roadways solely to reach a destination and generally experience the scenery in the short term. Recreationists, such as hikers, cyclists, and equestrians, may utilize historic trails within the County and generally experience the scenery in the short term.

Visual sensitivity depends on the number and type of viewers and the frequency and duration of views. Generally, visual sensitivity increases with an increase in total number of viewers, the frequency of viewing (e.g., daily or seasonally), and the duration of views (i.e., how long a scene is viewed). Sensitivity tends to be lower for views seen by people driving to and from work or as part of their work. Views from recreational trails and areas, State Scenic Highways, and scenic overlooks are generally assessed as having high visual sensitivity (County 2003).

4.1.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have significant aesthetic impacts if the Countywide program would:

1. Have a substantial adverse effect on a scenic vista;

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway;
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings; and,
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.3 Impact Analysis

AES-1 The proposed project may result in a substantial adverse effect on a scenic vista.

Implementation of the proposed Project would involve installation of fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. The exact alignment of future broadband infrastructure is unknown at this time and would be based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources.

Scenic vistas are defined as expansive views of highly valued landscapes from publicly accessible viewpoints. Future development of individual fiber projects would have the potential to affect scenic vistas if new or intensified development blocked views of areas that provide or contribute to such vistas. Potential impacts could include blocking views of a scenic vista from publicly accessible vantage points or the alteration of the overall scenic vista itself. The County has two vista points, both located along SR 89, that have been officially designated by Caltrans.

Construction

Construction activities would result in temporary visual changes for sensitive viewer groups (e.g., residents, recreation users). Construction of future individual fiber projects would likely occur over many years. It is possible that multiple, individual fiber projects could have overlapping construction timeframes (or phases). Additionally, any individual segment could involve multiple construction crews working simultaneously, with plowing, trenching, or directional drilling occurring at the same time in different locations of the segment. Construction activities would occur between 7:00 a.m. and 7:00 p.m. on weekdays and would not occur at night.

The construction methods for future individual fiber projects in El Dorado County would be determined based on various factors such as location, micro-site conditions, and constraints present at each future individual fiber project site. These methods may include, but are not limited to, horizontal directional drilling, plowing, trenching, and microtrenching. After construction is complete, the staging areas would be returned to conditions similar to those that existed prior to construction of individual fiber projects. As construction activities would be short-term and temporary, construction of the proposed Project would not permanently or substantially obstruct views from scenic vistas, and the impact would be less than significant.

Operation

Individual fiber projects could be installed either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The installation of new underground fiber conduit or fiber optic line in existing conduit would not be visible and would therefore have no substantial adverse effect on scenic vistas. However, individual fiber projects could be installed overhead on existing or newly constructed utility poles within viewsheds of the designated Emerald Bay/Vikingsholm and Christmas Valley vista points located along SR 89. Although many of the roadways within the Project area are currently lined with tall vertical features (e.g., mature trees, utility poles, streetlights, and roadway signs) and horizontal features (e.g., building and pavement edges, fences, and utility lines), scenic vistas in the County could be affected by the operation of aboveground individual fiber projects located within the viewshed of the scenic vista. With implementation of Mitigation Measure AES-1, project-specific impacts on scenic vistas would be reduced to less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure AES-1: Visual Impact Assessment

For any individual fiber project proposed within the viewshed of a designated scenic vista, eligible State Scenic Highway, and/or designated State Scenic Highway, the project applicant shall prepare a Visual Impact Assessment (VIA) for Lead Agency review and approval. The VIA shall be prepared by a qualified professional with experience in visual resource analysis. The VIA shall evaluate the potential impacts of the project on scenic resources in accordance with the California Environmental Quality Act (CEQA) Guidelines, including but not limited to consideration of aesthetic values, visual quality, and the character of the surrounding landscape.

The VIA shall include the following components:

- **Baseline Conditions:** Documentation of existing visual conditions, including photographs, renderings, and/or other visual tools to establish the project site's current view and its relationship to surrounding scenic resources.
- **Visual Simulations:** Preparation of photo-realistic visual simulations depicting the project as proposed from key public viewpoints, including those within the scenic vista or from the State Scenic Highway.
- **Impact Analysis:** Identification of potential impacts on scenic vistas and resources, using thresholds of significance established under CEQA Guidelines or applicable local policies.
- **Design Recommendations or Mitigation Measures:** Identification of feasible design measures or project-specific mitigation measures to avoid, minimize, and/or reduce potentially significant visual impacts. These measures may include, but are not limited to:
 - Modifications to project design, height, massing, and/or orientation.
 - Use of landscaping, vegetative screening, and/or earthworks to soften visual impacts.
 - Use of non-reflective and/or neutral-colored materials to reduce visual contrast.
 - Adjustment of lighting design to prevent glare and/or light trespass into sensitive areas.

All recommendations and mitigation measures identified in the VIA and approved by the Lead Agency shall be incorporated into project plans and specifications before project approval.

Significance with Mitigation: Less than significant.

AES-2 The proposed project may damage scenic resources such as trees, rock outcroppings, and historic buildings within a State Scenic Highway.

Portions of U.S. 50 and SR 89 within El Dorado County are designated as State Scenic Highways. Additionally, portions of SR 88 traverse the Amador-El Dorado county line, which is a designated State Scenic Highway. Individual fiber projects could be installed either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. The broadband infrastructure could follow other utility installations; therefore, it is likely that the ground along these alignments has been previously disturbed by prior utility work. Many of these connections would generally follow the route of the roadway, particularly if the applicable areas have other issues that could affect access, such as vegetation, geologic setting, landscape, and/or water features that would not be disturbed. However, there is potential for individual fiber projects to be installed within the viewshed of a designated State Scenic Highway.

As discussed in Impact AES-1 above, construction activities would be short-term and temporary and would occur primarily within previously disturbed areas. Under the proposed Project, fiber optic lines would be predominantly constructed under or along existing roads and in areas that have been previously disturbed or developed. The installation of individual fiber projects underground would utilize horizontal directional boring, which involves minimal ground disturbance and is intended to avoid most aboveground resources, such as rock outcroppings, waterways, and historic buildings. While this program EIR conservatively assumes that new ground disturbance would be required for the entire Project, there would be potential for utilizing existing conduit where only installation of fiber optic line would be required. If deemed feasible, the new broadband infrastructure constructed under individual fiber projects would connect to existing infrastructure in the Project area supported by existing service providers. New aboveground or underground fiber optic lines, utility poles, and temporary staging areas to support their construction would occur primarily within previously disturbed areas. Potential disturbed or undisturbed areas would be returned to pre-construction conditions after construction is complete.

Individual fiber projects could be installed overhead on existing or newly constructed utility poles within the vicinity of U.S. 50, SR 89, and/or SR 88. Additionally, aboveground individual fiber projects could be installed along roadway segments and previously disturbed and/or developed areas within the County that may have scenic resources such as rivers, streams, mountains, and forests, as well as buildings of architectural value. Although the aboveground fiber optic lines on newly or previously constructed utility poles could be introduced within portions of eligible and/or designated State Scenic Highways, many of the roadways within the Project area are lined with tall vertical features (e.g., mature trees, utility poles, streetlights, and roadway signs) and horizontal features (e.g., building and pavement edges, fences, and utility lines). However, eligible and/or designated State Scenic Highways in the County could be affected by operation of aboveground individual fiber projects located within the viewshed of the

highway. Implementation of Mitigation Measure AES-1 would ensure that scenic resources are protected and that project-specific visual impacts are adequately addressed to reduce potential impacts to a less than significant level.

Significance without Mitigation: Potentially significant impact.

See Impact AES-1 for Mitigation Measure AES-1.

Significance with Mitigation: Less than significant impact.

AES-3 The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings in a non-urbanized area.

Construction

The construction methods for future individual fiber projects in El Dorado County would be determined based on various factors such as location, micro-site conditions, and constraints present at each future individual fiber project site. These methods include horizontal directional drilling, plowing, trenching, and microtrenching. After construction is complete, construction staging areas would be returned to conditions similar to those that existed prior to construction of individual fiber projects. Staging areas are anticipated to be established along public roadways or existing disturbed areas along proposed construction routes in the Project area. If road constraints prevent locating staging areas along roadways, alternative areas such as paved or graveled yards would be used. The exact locations of staging areas and equipment lay-down areas would be determined during the final construction plans for each individual fiber project. The staging areas would be returned to conditions similar to those that existed prior to construction.

Construction activities and equipment would likely be visible to some motorists, residents, employees, tourists, and/or recreationists. Construction activities would result in the addition of unnatural elements to views that could contrast with and encroach on natural elements; however, these activities would occur in pockets throughout the County and would be temporary in nature. This would limit the number of viewers of any particular active construction area. The temporary and small-scale nature of construction that could result from implementation of the proposed Project would ensure that impacts during construction would be less than significant. As discussed under Impact AES-1, construction activities would be short-term and temporary; therefore, the proposed Project would not permanently or substantially degrade the existing visual character or quality of public views within the Project area.

Operation

Implementation of the Project would involve installation of fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. The broadband infrastructure could follow other utility installations; therefore, it is likely that the ground along these alignments has been previously disturbed by prior utility work. Additionally, many of these connections would generally follow the route of the roadway, particularly if the applicable areas

have other issues that could affect access, such as vegetation, geologic setting, landscape, and/or water features that would not be disturbed. This program EIR conservatively assumes that new ground disturbance would be required for the entire Project area; however, there would be potential for utilizing existing conduit where installation of fiber optic lines would be required. If deemed feasible, the new broadband infrastructure constructed under individual fiber projects would connect to existing infrastructure in the Project area supported by existing service providers.

Future underground fiber optic lines would not be visible and would therefore not substantially degrade the existing visual character or quality of public views of the site. However, the Project proposes aboveground fiber optic lines that would utilize existing or newly construction utility poles. Portions of roadways within the County are lined with tall vertical features, including mature trees, utility poles, streetlights, and roadway signs as well as horizontal features, including buildings, pavement edges, fences, and utility lines. Although aboveground fiber optic lines and newly constructed utility poles would be introduced into existing viewsheds, these structures would be generally consistent with existing vertical and horizontal features within the program area. New aboveground fiber optic lines and utility poles would not be large enough to dominate existing viewsheds or detract from existing views in the County. Some portions of the County have higher viewer sensitivity, such as those areas with more residences or recreational resources (e.g., trails); however, the visual changes resulting from Project implementation would be compatible with the existing environment, and the overall change in visual quality would be less than significant as aboveground fiber conduit features would not result in any notable changes to existing visual elements, or to the vividness, intactness, or unity of existing views.

Therefore, construction and operation of the proposed Project would not substantially degrade existing visual character or quality of public views in non-urbanized areas. The impact would be less than significant.

Significance without Mitigation: Less than significant.

AES-4 The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

“Light pollution” refers to all forms of unwanted light in the night sky, including glare, light trespass, sky glow, and over-lighting. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space, such as mountain and rural communities in El Dorado County. The main sources of daytime glare are from sunlight reflecting from structures with reflective surfaces such as windows. Building materials (e.g., reflective glass and polished surfaces) are the most substantial sources of glare. The amount of glare depends on the intensity and direction of sunlight, which is more acute at sunrise and sunset because the angle of the sun is lower during these times (City of South Lake Tahoe 2010).

A source of glare during the nighttime hours is artificial light. The sources of new and increased nighttime lighting and illumination include, but are not limited to, new residential development, lighting from nonresidential uses, lights associated with vehicular travel (e.g., car headlights), street lighting, parking lot lights, and security-related lighting for nonresidential uses. Increased nighttime lighting and illumination could result in adverse effects to adjacent land uses through the spilling over of light into these areas and skyglow conditions (City of South Lake Tahoe 2010).

Construction

Construction activities would occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on weekends. In the event that construction lighting becomes a nuisance to surrounding uses, the County would ensure construction-related lighting would be oriented away from adjacent residential areas, if necessary, and consist of the minimal wattage necessary to provide safety at the construction site. Therefore, short-term light and glare impacts associated with construction activities would be less than significant.

Operation

Individual fiber projects would not introduce new light sources. Security lighting may be used; however, all lighting would be minimal and downward facing to prevent light spillover and glare. No reflective surfaces that could cause glare would be used for aboveground infrastructure. Therefore, impacts related to long-term light and glare from operation of the proposed Project would be less than significant.

Significance without Mitigation: Less than significant.

4.1.4 Cumulative Impacts

AES-5 The proposed project would not result in a significant cumulative impact with respect to aesthetics.

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly have a substantial adverse effect on a scenic vista, substantially damage scenic resources, degrade existing character or public views, or create a new source of substantial light or glare. The analysis of cumulative impacts is based on impacts of the proposed Project and the other cumulative plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches.

Numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. These transportation projects generally require temporary construction activities that are not anticipated to be cumulatively considerable as construction would be short-term and temporary. However, these transportation projects may result in permanent changes to the existing visual setting and viewsheds within the County. These projects would be required to comply with local design and zoning requirements to ensure that the existing visual character and quality is maintained within the County. Individual fiber projects under the proposed Project are not expected to combine with future transportation projects to produce a considerable contribution to cumulative impacts.

Effects on scenic resources generally occur at the interface between development and the scenic resources and tend to be localized. As discussed above in Impact AES-1 and AES-2, implementation of Mitigation Measure AES-1 would ensure that scenic resources are protected and that project-specific visual impacts are adequately addressed to reduce potential impacts to a less than significant level. Therefore, the proposed Project would have a less than cumulatively considerable impact related to aesthetics.

Significance without Mitigation: Potentially significant impact.

See Impact AES-1 for Mitigation Measure AES-1.

Significance with Mitigation: Less than significant impact.

4.1.5 References

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4.2 AGRICULTURE AND FORESTRY RESOURCES

This section describes the regulatory framework and existing conditions related to agriculture and forestry resources and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on agriculture and forestry resources were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to agriculture and forestry resources.

4.2.1 Environmental Setting

4.2.1.1 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for agriculture and forestry resources. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Farmland Protection Policy Act (Public Law 97-98, 7 USC Section 4201)

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with State, local units of government, and private programs and policies to protect farmland. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every two years.

The FPPA does not authorize the federal government to regulate the use of private or non-federal land or, in any way, affect the property rights of owners. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency, or with assistance from a federal agency.

For the purpose of FPPA, Farmland includes Prime Farmland, Unique Farmland, and Land of Statewide or Local Importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland or other land, but not water or developed land. The Natural Resource Conservation Service (NRCS) uses a land evaluation and site assessment system to establish a farmland conversion impact rating score on proposed sites of federally funded and assisted projects. This score is used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level.

Federal Land Policy and Management Act

The Federal Land Policy and Management Act (FLPMA) of 1976 was passed to establish policy for managing Bureau of Land Management (BLM)-administered public lands, including the long-term stability and use of BLM-administered public lands by the livestock industry. The FLPMA authorized 10-year grazing permits and required a 2-year notice of cancellation. The FLPMA also directed grazing advisory boards (formed under the Taylor Grazing Act) to guide the BLM in developing allotment management plans and allocating range betterment funds.

Unlike the Taylor Grazing Act, the FLPMA does not distinguish between grazing permits and leases. In Sections 401 through 403 of the FLPMA, which deals with grazing management on the public lands, the term “permit or lease” appears over 25 times together and never as only “permit” or “lease.” The clear intent of Congress is that BLM’s grazing administration on all public lands be consistent for both permits and leases.

The BLM’s grazing regulations were changed in July 1978 to eliminate separate sections addressing administration of Section 3 permits and Section 15 leases. This made the regulations consistent with the language of the FLPMA in that no distinction is made between permits and leases.

State Regulations

California Department of Conservation, Division of Land Resource Protection

California Public Resources Code Section 21060.1 defines agricultural land for the purposes of assessing environmental impacts using the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP). The DOC applies the NRCS soil classifications to identify designated agricultural lands. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and monitor the conversion of these lands. Pursuant to the FMMP, designated agricultural lands are included in Important Farmland Maps used in planning for California’s agricultural land resources.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is promulgated in California Government Code Section 51200-51297.4, and is applicable to specific land parcels within the State of California. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments.

The Williamson Act program is administered by the DOC in conjunction with local governments, which administer the individual contract arrangements with landowners. The landowner commits the parcel to a 10-year period within which no conversion out of agricultural use is permitted. Each year, the contract automatically renews unless a notice of non-renewal or cancellation is filed. In return, the land is taxed at a rate based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. Although the DOC coordinates and monitors implementation of the Williamson Act, each county regulates the criteria for participation and administers the program.

California Public Resource Code

The California Public Resources Code governs forestry, forests, and forest resources within the State. “Forest land” is defined by Public Resources Code Section 12220(g) as “land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” Timberland is defined by Public Resources Code Section 4526 as “land, other than land owned by the federal government..., which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.”

California Government Code

Chapter 6.7 of the California Government Code (Sections 51100–51155) regulates timberlands within the State. A timberland production zone is defined in Section 51104(g) as an area that has been zoned pursuant to Government Code Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. In this context, “compatible uses” include any use that “does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber” (Government Code Section 51104(h)).

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe’s importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin (County 2003).

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024). Chapter 61, *Vegetation and Forest Health*, regulates the management of forest resources to achieve and maintain the environmental threshold standards for species and structural diversity, to promote the long-term health of natural resources, to restore and maintain suitable habitats for native wildlife species, and to reduce accumulations of hazardous fuels in order to decrease the likelihood of catastrophic wildfire events.

Sierra Nevada Forest Plan

The Sierra Nevada Forest Plan provides federal direction on habitat management for 11 national forests: Modoc, Lassen, Plumas, Lake Tahoe Basin, Tahoe, Eldorado, Stanislaus, Sequoia, Sierra, Inyo, and portions of Humboldt-Toiyabe. The goal of the forest plan is to manage sensitive wildlife habitat cautiously and provide for species conservation while addressing the needs of forest managers to reduce the threat of wildfire. The Sierra Nevada Forest Plan addresses five objectives for the Sierra Nevada region:

- Preserve and enhance old-forest ecosystems and associated species;
- Identify and implement effective techniques for fire and fuel management;
- Preserve and enhance aquatic, riparian, and meadow ecosystems and associated species;
- Manage noxious weeds; and
- Sustain lower-westside hardwood forest ecosystems.

Eldorado National Forest Land and Resource Management Plan

The Eldorado National Forest Land and Resource Management Plan (Plan) was prepared by the USFS in 1988. The Plan covers 786,994 acres of forestland in parts of Alpine, Amador, El Dorado, and Placer counties, including both National Forest and forestlands in other ownership. The plan prescribes compatible sets of forest practices for various types of land and resources divided by management areas and contains targets for the production of market and nonmarket goods and services. The Forest Land and Resource Management Plan of various National Forests, including the Eldorado National Forest Plan, are now being revised to bring their management practices and guidelines into conformance with the policies of that document (City of South Lake Tahoe 2010).

Forest Practice Act

The California Department of Forestry and Fire Protection (CAL FIRE) administers the Forest Practice Act that regulates logging on privately owned lands in California. The Forest Practice Act was enacted to ensure that logging is done in a manner that will preserve and protect California's fish, wildlife, forests, and streams. Additional Forest Practice Rules enacted by the State Board of Forestry and Fire Protection are also enforced to protect these resources. CAL FIRE requires the preparation of an environmental review document, called a Timber Harvesting Plan, when removing trees on parcels greater than 3 acres in size for commercial purposes. Cutting or removing trees during the conversion of timberlands to land uses other than the growing of trees is considered a commercial operation by Forest Practice Rules. In addition, a Timberland Conversion Permit or a Notice of Exemption from Timberland Conversion for Subdivision Permit is required when converting timberland to a non-timber growing use.

Local Regulations

El Dorado County Code

The El Dorado County Right to Farm Ordinance (Section 130.40.290) was established to conserve and protect agriculturally zoned, commercially viable land within the County and protect agricultural landowners from nuisance complaints related to cultivation, irrigation, spraying, fertilizing, and other activities that are a part of normal agricultural operations. The Right to Farm Ordinance is intended to protect future agricultural operations and the expansion of existing operations in areas zoned for agricultural use (A, AE, PA, and residential agriculture [RA] zones on parcels 20 acres [RA-20] or larger) from nuisance complaints caused by changing uses on adjacent lands and encroaching development. The focus is to remove barriers that keep new farmers from entering into the field of agriculture in addition to preventing existing farms from curtailing or ceasing operations.

El Dorado County General Plan

Agriculture and forestry resources are addressed within the *Conservation and Open Space Element* and the *Agriculture and Forestry Element* of the County General Plan.

The *Conservation and Open Space Element* contains the following goals, objectives, and policies that apply to the Project (County 2017):

- **Goal 7.1: Soil Conservation.** Conserve and protect the County’s soil resources.
 - **Objective 7.1.1: Soils.** Long-term soil productivity.
 - **Policy 7.1.1.1:** Conserve and maintain important agricultural soils for existing and potential agricultural and forest uses by limiting non-agricultural/non-forestry development on those soils.
- **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 7.4.4: Forest, Oak Woodland, and Tree Resources.** Protect and conserve forest, oak woodland, and tree 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 conservation protection, planting, restoration, and regeneration of native trees in new developments and within existing communities.
 - **Policy 7.4.4.3:** Encourage the clustering of development to retain the largest contiguous areas of forests and oak woodlands possible.

The *Agriculture and Forestry Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2015):

- **Goal 8.1: Agricultural Land Conservation.** Maintain healthy sustainable forests that provide for raw materials while limiting the intrusion of incompatible uses into important forest lands.
 - **Objective 8.1.3: Protection of Agricultural Lands.** Protection of agricultural lands from adjacent incompatible land uses.
 - **Policy 8.1.3.1:** Agriculturally zoned lands including Williamson Act Contract properties shall be buffered from increases in density on adjacent lands by requiring a minimum of 10 acres for any parcel created adjacent to such lands. Parcels used to buffer agriculturally zoned lands should have a similar width to length ratio of other parcels when feasible.
 - **Policy 8.1.3.2:** Agriculturally incompatible uses adjacent to agricultural zoned lands shall provide a minimum setback of 200 feet from the boundary of the agriculturally zoned lands.

Agriculturally incompatible uses adjacent to agriculturally zoned land outside of designated Agricultural Districts shall provide a minimum setback of 200 feet on parcels 10 acres or larger.

Within a Community Region and Rural Center planning concept areas, agriculturally incompatible uses adjacent to agriculturally zoned land shall maintain a minimum setback of 50 feet. The 50-foot setback shall only apply to incompatible uses including residential structures.

The implementing ordinance shall contain provisions for administrative relief to these setbacks, where appropriate, and may impose larger setbacks where needed to protect agricultural resources.

- **Policy 8.1.3.4:** A threshold of significance for loss of agricultural land shall be established by the Agriculture Department and the Planning Department, with opportunity for public comment before adoption, to be used in rezone applications requesting conversion of agricultural lands to non-agricultural lands, based on the California Land Evaluation and Site Assessment (LESA) system. For projects found to have a significant impact, mitigation shall include 1:1 replacement or conservation for loss of agricultural land in active production and/or 1:1 replacement or conservation for land identified as suitable for agricultural production. A monitoring program should be established to be overseen by the Agricultural Department.
- **Policy 8.1.3.5:** On any parcel 10 acres or larger identified as having an existing or potential agricultural use, the Agricultural Commission must consider and provide a recommendation on the agricultural use (except for parcels assigned urban or other non-agricultural uses by the land use map for the 1996 General Plan) or potential of that parcel and whether the request will diminish or impair the existing or potential use prior to any discretionary permit being approved.
- **Objective 8.1.4: Development Entitlements.** Consideration of the agricultural use of land prior to approvals for any development entitlements.
 - **Policy 8.1.4.1:** The County Agricultural Commission shall review all discretionary development applications and the location of proposed public facilities involving land zoned for or designated agriculture, or lands adjacent to such lands, and shall make recommendations to the reviewing authority. Before granting approval, a determination shall be made by the approving authority that the proposed use:
 - A. Will not intensify existing conflicts or add new conflicts between adjacent residential areas and agricultural activities; and
 - B. Will not create an island effect wherein agricultural lands located between the project site and other non-agricultural lands will be negatively affected; and

- C. Will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjacent to agricultural lands.
- **Goal 8.4: Sustainable and Efficient Forest Production.** Minimize constraints inhibiting sustainable and efficient forest resource production.
 - **Objective 8.4.1: Forest Land Buffers.** Provide for buffer parcels and setbacks between timber production lands and adjacent incompatible land uses.
 - **Policy 8.4.1.2:** A permanent setback of at least 200 feet shall be provided on parcels located adjacent to lands identified as timber production lands designated Natural Resource and/or lands zoned Timberland Production Zone (TPZ). These setback areas shall be included in the zoning ordinance and shall be delineated on newly recorded parcel or subdivision maps. The Agricultural Commission may recommend a lesser setback to a minimum of 100 feet.

Projects located within a Community Region or Rural Center planning concept area shall maintain a minimum setback of 50 feet. The 50-foot setback shall only apply to incompatible uses including residential structures. All setbacks are measured from the property line.

- **Policy 8.4.2.1** The County Agricultural Commission shall evaluate all discretionary development applications involving identified timber production lands which are designated Natural Resource or lands zoned TPZ or lands adjacent to the same and shall make recommendations to the approving authority. Prior to granting an approval, the approving authority shall make the following findings:
 - A. The proposed use will not be detrimental to that parcel or to adjacent parcels for long-term forest resource production value or conflict with forest resource production in that general area;
 - B. The proposed use will not intensify existing conflicts or add new conflicts between adjacent proposed uses and timber production and harvesting activities;
 - C. The proposed use will not create an island effect wherein timber production lands located between the project site and other non-timber production lands are negatively affected;
 - D. The proposed use will not hinder timber production and harvesting access to water and public roads or otherwise conflict with the continuation or development of timber production harvesting; and
 - E. The proposed use will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjacent to timber production lands.

- **Implementation Measure AF-A:** Review the County Zoning Ordinance to identify revisions that accomplish the following:
 - A. Provisions that establish minimum densities of and setbacks on lands adjacent to agriculturally-zoned lands and timberlands to protect current and future agricultural and timber production on those lands as set forth below:
 - 1. 10-acre minimum parcel sizes adjacent to agriculturally-zoned lands. [Policy 8.1.3.1]
 - 2. 200 foot setback adjacent to agriculturally zoned lands. [8.1.3.2]
 - 7. 200-foot setback adjacent to timberlands. [Policy 8.4.1.2]
- **Implementation Measure AF-F:** Establish a threshold of significance for the loss of agricultural land, a procedure for evaluating a project's contribution to the loss, and means to mitigate losses so that the established threshold is not exceeded. The public shall be provided opportunity to comment on the program(s) before adoption. [Policy 8.1.3.4]
- **Implementation Measure AF-G:** Develop a procedure for the Agricultural Commission to review and provide recommendations regarding discretionary and capital improvement projects that may affect agricultural, grazing, and forestry lands including all lands zoned for agriculture. [Policies 8.1.3.5, 8.1.4.1, and 8.4.2.1]

City of Placerville General Plan

Agriculture and forestry resources are addressed within *Section V – Natural, Cultural, and Scenic Resources* of the City General Plan (City of Placerville 2004). The *Natural, Cultural, and Scenic Resources* section contains the following goal and policies that apply to the Project:

- **Goal B:** To prevent the premature conversion of agricultural lands and to protect the soil resources of the Placerville area.
 - **Policy 1:** The City of Placerville shall preserve, to the maximum extent possible, those soils most suitable for intensive agricultural production and encourage their continued use for agricultural purposes.
 - **Policy 2:** The City of Placerville shall direct development incompatible with agricultural activities away from valuable agricultural lands and into areas of lesser agricultural importance.
 - **Policy 3:** The City of Placerville shall encourage the County's continued use of Williamson Act contracts in the areas surrounding Placerville's Sphere of Influence.
 - **Policy 7:** The City of Placerville shall, to the maximum extent possible, prevent the dumping of wastes and other substances, such as pesticides, soil sterilants, and toxic wastes, harmful to soil structure, soil organisms, or fertility.

4.2.1.2 Existing Conditions

Agricultural and forest lands make up a large percentage of the undeveloped lands in the County. The following sections provide details of the agriculture and forestry resources in El Dorado County.

Agriculture Resources

Agriculture has been an important element of life in El Dorado County. Agricultural influences and activities contribute to the economic stability of the County through crop production. Lands on the western slope of the County are considered the most valuable for agriculture because of the area's gentler slopes and richer soils. Historically, grazing of cattle and other livestock was the primary economic contributor in El Dorado County. Recently, production of fruit (including wine grapes) and nuts has become a major contributor to the County's agricultural production value. The soils found in the foothills provide optimal growing conditions for various types of agricultural activities, ranging from cultivation of fruit, nut, and vegetable crops to viticulture and grazing (County 2003).

Under the Williamson Act, the owner of agricultural land may enter into a contract with the County if the landowner agrees to restrict the use of the land to the production of commercial crops or the raising and grazing of livestock for a term of not less than 10 years. The term of the contract is automatically extended each year unless the landowner or the County serves a notice of nonrenewal. All lands subject to a Williamson Act or Farmland Security Contract are zoned AE (Exclusive Agricultural) or AP (Agricultural Preserve). Certain restrictions apply to these zones that do not normally apply to other agricultural zone districts in the County (County 2024).

In 2020, the DOC's Division of Land Resource Protection determined that the western slope of El Dorado County has 529 acres classified as Prime Farmland, 794 acres of Farmland of Statewide Importance, 3,115 acres of Unique Farmland, and 58,213 acres of Farmland of Local Importance (DOC 2020). The eastern portion of the County, encompassing approximately 608,536 acres, falls outside of the NRCS soil survey and has not been mapped (DOC 2024). The majority of this eastern portion of the County contains forestland, as discussed further below.

Forestry Resources

Historically, the lifestyle and economy of El Dorado County have been closely linked to the presence of large amounts of forestland. Approximately 864,000 acres of the County are covered with forestland (defined as land containing at least 10 percent live trees or land that previously had this minimum coverage and that is not presently developed for non-forest uses). Timberlands are generally defined as lands capable of growing 20 cubic feet per year per acre of harvestable wood. This definition applies to approximately 636,000 acres of forestland, or about 75 percent of the total forestland in the county. Of the timberland acreage, 377,000 acres (about 59 percent) are National Forest acreage, 120,000 acres (about 19 percent) are owned by the timber industry, other private landowners control 131,000 acres (about 21 percent), and other public agencies own 8,000 acres (about 1 percent; County 2003).

Eldorado National Forest

The Eldorado National Forest covers 786,994 total acres, with 558,344 acres in El Dorado County and the rest in Alpine, Amador, and Placer counties. The U.S. Forest Service (USFS) has jurisdiction over 596,724 of those acres the remaining 190,270 acres are lands owned privately or by other agencies within the

National Forest boundary. As stated above, 377,000 acres (59 percent) of the county's timberlands are in the Eldorado National Forest (County 2003).

Tahoe National Forest

The Tahoe National Forest covers 177,133 acres and is located in El Dorado, Nevada, Placer, Plumas, Sierra, and Yuba counties. The portion of Tahoe National Forest that is in El Dorado County is managed separately, along with other national forestland in the Lake Tahoe Basin, by the Lake Tahoe Basin Management Unit (County 2003).

Private Timberlands

El Dorado County had 636,000 acres of timberland in 1996, with 251,000 acres in private ownership by the forest industry (120,000 acres), private farmers (3,000 acres), or other private companies (128,000 acres). El Dorado County's timberlands provide economic benefits for businesses and residents of the county by serving as a major source of employment (i.e., the logging industry) and providing the raw material for forest products, including lumber for construction (County 2003).

4.2.2 Significance Thresholds

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project would have a significant impact on agriculture and forestry resources if the Project would:

1. Result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use;
2. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract;
3. Conflict with existing zoning for, or cause rezoning of forest land (as defined in California Public Resources Code section 12220 (g)), timberland (as defined by California Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g]);
4. Result in the loss of forest land or conversion of forest land to non-forest use;
5. Other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

4.2.3 Impact Analysis

AG-1 The proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural use.

Lands mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance are primarily located within the western slope of the County (DOC 2024). As such, areas of the County could potentially include small strips or plots of land that are designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and could connect to existing conduit or utility poles located within public or private utility easements. The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The installation of broadband infrastructure would not interfere with the continuation of existing aboveground uses after construction is completed. It is anticipated that individual fiber projects, including construction staging and equipment lay-down areas, would not be sited on lands that are currently in agricultural production by the respective landowners.

As the proposed Project would be primarily located within previously disturbed and/or developed areas, the Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

AG-2 The proposed project would not conflict with existing zoning for agricultural use or with a Williamson Act contract.

Areas of the County could potentially include small strips or plots of land that are zoned for agricultural use or under a Williamson Act contract. As discussed in Impact AG-1, the majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Broadband infrastructure could also be constructed on private and federal lands and could connect to existing conduit or utility poles located within public or private utility easements. The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The installation of broadband infrastructure would not interfere with the continuation of existing aboveground uses after construction is completed. It is not anticipated that individual fiber projects, including construction staging and equipment lay-down areas, would be sited on lands that are currently in agricultural production by the respective landowners.

Therefore, as the proposed Project would be primarily located within previously disturbed and/or developed areas, the Project would not conflict with existing zoning for agricultural use or with a Williamson Act contract, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

AG-3 The proposed project would not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zoned for Timberland Production.

The majority of the eastern portion of the County includes land within the Eldorado National Forest, Tahoe National Forest, or private timberland. As such, areas of the County could potentially include small strips or plots of land that are zoned forest land or timberland. As discussed in Impact AG-1 and AG-2, the majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility

easements. If Project activities are located within federally managed lands, individual fiber projects would require an easement or ROW for construction and long-term maintenance of the infrastructure from the relevant federal agency.

As the proposed Project would be primarily located within previously disturbed and/or developed areas, the Project would not conflict with existing zoning of forest land, timberland, or timberland zoned Timberland Production. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

AG-4 The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.

As discussed above in Impact AG-3, although areas within the County could potentially include small strips or plots of forest land, the proposed Project would be primarily located within previously disturbed and/or developed areas. Therefore, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest uses, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

AG-5 The proposed project would not result in changes in the existing environment which, due to their location or nature, would result in conversion of agricultural lands to non-agricultural use or forest land to non-forest land.

As discussed in Impacts AG-1 through AG-4, areas of the County could potentially include small strips or plots of land that are designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, zoned for agricultural or forest land use, or be located under a Williamson Act contract. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Broadband infrastructure could also be constructed on private and federal lands and could connect to existing conduit or utility poles located within public or private utility easements. The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The installation of broadband infrastructure would not interfere with the continuation of existing aboveground uses after construction is completed. It is not anticipated that individual fiber projects, including construction staging and equipment lay-down areas, would be sited on lands that are currently in agricultural or timberland production by the respective landowners.

As the proposed Project would be primarily located within previously disturbed and/or developed areas, the proposed Project would not convert agricultural or forest land to non-agricultural or non-forest uses, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

4.2.4 Cumulative Impacts

AG-6 The proposed project would not result in a cumulative impact with respect to agriculture and forestry resources.

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projects in El Dorado County, would directly or indirectly result in the conversion of Important Farmland to nonagricultural use, conflict with existing zoning for agricultural or forest use, or result in the loss of agricultural or forest land to non-agricultural or non-forest uses. As discussed above under Impact AG-1 through AG-5, implementation of the proposed Project would result in less than significant impacts to agriculture and forestry resources.

The analysis of cumulative impacts is based on impacts of the proposed Project and other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. Numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Similar to the proposed Project, the vast majority of these transportation projects are anticipated to occur within previously disturbed and/or developed areas and would not conflict with existing zoning of agriculture, forest, or timberland land, or convert agriculture or forest land to non-agriculture or non-forest use. Therefore, the proposed Project would have a less than cumulatively considerable impact related to agriculture and forestry resources.

Significance without Mitigation: Less than significant impact.

4.2.5 References

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4.3 AIR QUALITY

This section describes the regulatory framework and existing conditions related to air quality and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on air quality were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to air quality.

4.3.1 Environmental Setting

The western slope of El Dorado County (County) falls within the Mountain Counties Air Basin (MCAB) and is within the jurisdictional boundaries of the El Dorado County Air Quality Management District (EDCAQMD). The MCAB includes portions of Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer, Plumas, Sierra, and Tuolumne counties, and is composed of seven air districts within the central and northern Sierra Nevada Mountain range. Air quality in the El Dorado County portion of the MCAB is regulated by the U.S. Environmental Protection Agency (USEPA) at the federal level, by the California Air Resources Board (CARB) at the State level, and by EDCAQMD at the regional level.

The Lake Tahoe Basin falls within the Lake Tahoe Air Basin (LTAB), which encompasses the eastern portion of El Dorado and Placer counties and Lake Tahoe. The LTAB is defined by the area within the 7,000-foot contour, which is continuous around Lake Tahoe. Air quality in the El Dorado County portion of the LTAB is regulated by the USEPA at the federal level, by CARB at the State level, and by the Tahoe Regional Planning Agency (TRPA) and EDCAQMD at the regional level.

4.3.1.1 Air Pollutant Descriptors and Terminology

Criteria pollutants are defined by State and federal law as a risk to the health and welfare of the general public. In general, criteria air pollutants include the following compounds:

- Ozone (O₃)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO₂)
- Particulate matter (PM), which is further subdivided:
 - Coarse PM, 10 micrometers or less in diameter (PM₁₀)
 - Fine PM, 2.5 micrometers or less in diameter (PM_{2.5})
- Sulfur dioxide (SO₂)
- Lead (Pb)

Criteria pollutants can be emitted directly from sources (primary pollutants, e.g., CO, SO₂, PM₁₀, PM_{2.5}, and lead), or they may be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere (secondary pollutants, e.g., ozone, NO₂, PM₁₀, and PM_{2.5}). PM₁₀ and PM_{2.5} can be both

primary and secondary pollutants. The principal precursor pollutants of concern are reactive organic gases ([ROGs] also known as volatile organic compounds [VOCs])¹ and nitrogen oxides (NO_x).

The descriptions of sources and general health effects for each of the criteria air pollutants are shown in Table 4.3-1. Specific adverse health effects on individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and characteristics of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_x) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone and NO₂ are, therefore, the product of emissions generated by numerous sources throughout a region. Emissions of criteria pollutants from vehicles traveling to or from the Project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these criteria pollutant emissions cannot be meaningfully correlated to the incremental contribution from the Project.

Table 4.3-1
SUMMARY OF COMMON SOURCES AND HUMAN HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Major Man-Made Sources	Human Health Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant, aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to climate change and nutrient overloading, which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO _x) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles and dyes.
Particulate Matter (PM ₁₀ and PM _{2.5})	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and other sources.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).

¹ CARB defines and uses the term ROGs while the USEPA defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

Pollutant	Major Man-Made Sources	Human Health Effects
Sulfur Dioxide (SO ₂)	A colorless, nonflammable gas formed when fuel containing sulfur is burned, when gasoline is extracted from oil, or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid, which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CARB 2024a; USEPA 2024

4.3.1.2 Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs may be carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe, and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

4.3.1.3 Diesel Particulate Matter

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is referred to as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2024b). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a notable effect on California's population—it is estimated that about 70 percent of the total known cancer risk related to air toxics in California is attributable to DPM (CARB 2024b).

4.3.1.4 Naturally Occurring Asbestos

Asbestos dust is a known carcinogen and is classified as a TAC by CARB. Naturally occurring asbestos (NOA) most commonly occurs in ultramafic rock (i.e., igneous and metamorphic rock with low silica content) that has undergone partial or complete alteration to serpentine rock (or serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, is associated with ultramafic rock, particularly near geological faults. Some areas of the County are known to contain NOA. Earthmoving activities in areas containing NOA could result in potentially significant levels of NOA in fugitive dust. See Figure 4.3-1, *Asbestos Review Areas*, for a map of the known areas of NOA, areas likely to contain NOA, and buffer zones for known and likely NOA areas.

4.3.1.5 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for air quality. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Clean Air Act

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants. On February 7, 2024, the USEPA announced a final rule to lower the annual arithmetic mean (AAM) primary NAAQS for PM_{2.5} from 12 µg/m³ to 9 µg/m³. The new final rule retains the existing 24-hour primary NAAQS for PM_{2.5} of 35 µg/m³ and the existing AAM secondary NAAQS for PM_{2.5} of 15 µg/m³. Table 4.3-2 shows the federal and State ambient air quality standards (AAQS) for these pollutants.

**Table 4.3-2
AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards	Federal Standards	Federal Standards
			Primary ¹	Secondary ²
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Same as Primary
PM ₁₀	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM	20 µg/m ³	–	Same as Primary
PM _{2.5}	24 Hour	–	35 µg/m ³	Same as Primary
	AAM	12 µg/m ³	9 µg/m ³	15 µg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	1 Hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	–
	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
SO ₂	1 Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)	–	–

Pollutant	Averaging Time	California Standards	Federal Standards	Federal Standards
			Primary ¹	Secondary ²
Lead	30-day Avg.	1.5 µg/m³	–	–
	Calendar Quarter	–	1.5 µg/m³	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m³)		

Source: CARB 2016

¹ National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

² National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

³ O₃: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM₁₀: large particulate matter; AAM: Annual Arithmetic Mean; PM_{2.5}: fine particulate matter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO₂ nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer; –: No Standard.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. Areas that do not meet the NAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. The area air quality attainment status for the El Dorado County portion of the MCAB and LTAB is shown in Table 4.3-3.

**Table 4.3-3
ATTAINMENT STATUS FOR EL DORADO COUNTY**

Pollutant	State of California Attainment Status	Federal Attainment Status
<i>El Dorado County Portion of the MCAB</i>		
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment	Nonattainment
Suspended Particulate Matter (PM ₁₀)	Nonattainment	Unclassifiable
Fine Particulate Matter (PM _{2.5})	Unclassified	Nonattainment/Unclassified/Attainment
Carbon Monoxide (CO)	Unclassified	Unclassifiable/Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Unclassifiable/Attainment
Lead	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO ₂)	Attainment	Unclassifiable/Attainment
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Visibility Reducing Particles	Unclassified	No Federal Standard

Pollutant	State of California Attainment Status	Federal Attainment Status
<i>El Dorado County Portion of the LTAB</i>		
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment	Unclassified/Nonattainment
Suspended Particulate Matter (PM ₁₀)	Nonattainment	Unclassified
Fine Particulate Matter (PM _{2.5})	Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Nonattainment	Unclassified/Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO ₂)	Attainment	Unclassified/Attainment
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Visibility Reducing Particles	Unclassified	No Federal Standard

Source: CARB 2023

State Regulations

California Clean Air Act

CARB has established the more stringent California Ambient Air Quality Standards (CAAQS) for the seven criteria air pollutants listed above through the California CAA of 1988, and has also established CAAQS for additional pollutants, including sulfates, hydrogen sulfide (H₂S), vinyl chloride and visibility-reducing particles. Areas that do not meet the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. Within El Dorado County, the MCAB is currently classified as a nonattainment area under the CAAQS for ozone (1-hour and 8-hour) and PM₁₀, and the LTAB is currently classified as a nonattainment area under the CAAQS for ozone (1-hour and 8-hour), PM₁₀, and carbon monoxide (CO).

CARB is the State regulatory agency with the authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The air districts with jurisdiction over the MCAB and LTAB, including the EDCAQMD, are responsible for developing and implementing the rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, developing of air quality management plans, and adopting and enforcing air pollution regulations within the MCAB and LTAB.

State Implementation Plan

The CAA requires areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how an area will attain the NAAQS. The 1990 amendments to the CAA set deadlines for attainment based on the severity of an area's air pollution problem.

SIPs are not single documents—they are a compilation of new and previously submitted plans, programs (e.g., monitoring, modeling, permitting), district rules, State regulations and federal controls. Many of California's SIPs rely on a core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards the SIP revisions to the USEPA for

approval and publication in the Federal Register. The Code of Federal Regulations (CFR) Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items that are included in the California SIP (CFR 2024). At any one time, several California submittals are pending USEPA approval.

Regional Regulations

El Dorado County Air Quality Management District

EDCAQMD is the agency primarily responsible for compliance with NAAQS and CAAQS and for ensuring that air quality conditions are maintained in El Dorado County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the EDCAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the federal and California CAAs (County 2003).

Air Quality Plans

For the western slope of El Dorado County, the applicable ozone air plan is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, developed by the air districts in the Sacramento region to bring the region into attainment for the ozone NAAQS and CAAQS. The plan is a joint project between the Sacramento Metropolitan Air Quality Management District (SMAQMD), EDCAQMD, and three other air districts in the Sacramento region (SMAQMD 2017). The plan includes the western portion of El Dorado County and, thus, a portion of the Project area. In addition to not attaining the federal or State Ozone standards, the far western portion of El Dorado County is classified as nonattainment for the federal PM_{2.5} standard and the State PM₁₀ standard. The SIP contains all plans, programs, and regulations for attainment of the PM_{2.5} NAAQS in El Dorado County

Rules and Regulations

The following rules promulgated by the EDCAQMD would be applicable to the construction and/or operation of the proposed Project.

Rule 215 Architectural Coatings

Per Rule 215, architectural coating applied during the construction of the proposed Project shall not exceed the following VOC content limits measured in grams per liter (g/L; EDCAQMD 2020):

- Flat Coating – 50
- Non-flat Coatings – 100
- Traffic Marking Coatings – 100

Rule 223-1 Fugitive Dust

Per Rule 223-1, any activities associated with plans for grading and construction would require a Fugitive Dust Control Plan (FDCP; EDCAQMD 2005a). The FDCP must implement all construction Best

Management Practices (BMPs) included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment (EDCAQMD 2002).

Rule 223-2 Fugitive Dust – Asbestos Hazard Mitigation

The purpose of this Rule is to reduce the amount of asbestos particulate matter entrained in the ambient air as a result of any construction or construction related activities, that disturbs or potentially disturbs naturally occurring asbestos by requiring actions to prevent, reduce or mitigate asbestos emissions (EDCAQMD 2005b). Rule 223-2 would apply to any construction or construction related activity that:

- Is in excess of 20 cubic yards of graded material per project, or if required by the Air Pollution Control Officer; and
- Meets either of the following criteria:
 - Is located in an orographic ultramafic rock unit; or
 - has NOA, serpentine or ultramafic rock as determined by owner/operator, Professional Geologist or the Air Pollution Control Officer; or
 - is located within designated Naturally Occurring Asbestos Review Areas on the current El Dorado County Naturally Occurring Asbestos Review Area Map (included as Figure 4.3-1).
- If NOA, serpentine, or ultramafic rock is discovered by the owner/operator, a professional geologist, or the Air Pollution Control Officer in the area to be disturbed after the start of any construction or construction related activity.

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 disturbed, then the Air Pollution Control Officer may provide an exemption from this Rule. If a geologic evaluation has not been conducted, then an owner/operator shall submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity that is applicable to this Rule.

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the TRPA, a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan. The following chapters of the TRPA Code of Ordinances apply to the Project (TRPA 2024a):

Chapter 33, *Grading and Construction*, applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction. Specifically, Section 33.3.3, Dust Control, requires dust control measures shall be for any grading activity creating substantial quantities of dust. Dust control measures shall be approved by TRPA.

Chapter 65, *Air Quality/Transportation*, implements the Goals and Policies of the Air Quality sub-element for the purpose of attaining and maintaining applicable state and federal air quality standards and TRPA thresholds. Section 65.1, Air Quality Control, applies to direct sources of air pollution in the Tahoe region, including certain motor vehicles registered in the region, combustion heaters installed in the region, open burning, stationary sources of air pollution, and idling combustion engines. Section 65.2, Air Quality, Greenhouse Gas Reduction, and Mobility Mitigation Program, implements TRPA's 1992 Air Quality Plan and Goal Number 4, Policy 2 of the Development and Implementation Priorities sub-element, Implementation Element of the Goals and Policies in the Regional Plan, with respect to the establishment of fees and other procedures to offset impacts from indirect sources of air pollution; reduce mobile source greenhouse gas emissions per capita; and provide a more effective multimodal transportation system that reduces vehicle miles travelled (VMT) per capita.

TRPA Regional Plan

Air quality is addressed within the Air Quality sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b). The Air Quality sub-element contains the following goal and policies that apply to the Project:

- **Goal AQ-1:** Attain and maintain air quality in the region at levels that are healthy for humans and the ecosystem, achieve and maintain environmental thresholds and do not interfere with residents' and visitors' visual experience. It is intended that implementation of the control measures contained in the Air Quality sub-element and other TRPA programs will lead to attainment of the TRPA threshold standards and will also lead to attainment and maintenance of federal and state air quality standards.
 - **Policy AQ-1.2: Reduce or Limit Sources of Pollutants that Degrade Visibility.** Some air pollutants, such as fugitive dust and wood smoke, degrade visibility as well as harm human or ecosystem health. The Regional Plan will control those pollutants to minimize their impact on visibility, as well as their impact on human or ecosystem health.
 - **Policy AQ-1.3: Encourage the Reduction of Emissions from Motor Vehicles and other Motorized Machinery in the Region.** Significant emissions of air pollutants including greenhouse gases (GHGs) and entrained dust are produced by automobiles, motor vehicles and other gas powered machinery in the Region. The Land Use sub-element and the *Transportation Element* contain Goals and Policies to reduce the amount of air pollution generated from motor vehicles in the Region. Additionally, TRPA shall pursue other feasible and cost-effective opportunities to reduce emissions from motor vehicles and other gas-powered machinery in the Region.
 - **Policy AQ-1.7: Promote the Reduction of Air Quality Impacts from Construction and Property Maintenance Activities in the Region.**

Local Regulations

El Dorado County Code

Chapter 110.14, *Grading, Erosion, and Sediment Control*, regulates grading within the unincorporated areas of El Dorado County in order to protect life, limb, health, property and public welfare; avoid pollution of watercourses; and ensure that the intended use of a graded site is consistent with the General Plan and any specific adopted plans, including the Western El Dorado County Storm Water Management Plan, State Fire Safe Standards, and relevant El Dorado County ordinances. The ordinance establishes the procedures for the issuance of grading permits, approval of plans, and inspection of construction sites. The ordinance also requires that waterways and adjacent properties be protected from erosion, flooding, or sediment deposits that could result from grading activities.

El Dorado County General Plan

Air quality is addressed within the *Public Health, Safety, and Noise Element* of the County General Plan. The *Public Health, Safety, and Noise Element* contains the following goal, objectives, policies, and implementation measures that apply to the Project (County 2019):

- **Goal 6.7: Air Quality Maintenance.** Strive to achieve and maintain ambient air quality standards established by the USEPA and CARB; and minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.
 - **Objective 6.7.1: El Dorado County Clean Air Plan.** Adopt and enforce Air Quality standards to reduce the health impacts caused by harmful emissions.
 - **Policy 6.7.1.1:** Improve air quality through land use planning decisions.
 - **Policy 6.7.1.2:** Support local and regional air quality improvement efforts.
 - **Objective 6.7.7: Construction-related, short-term emissions.** Reduce construction related, short-term emissions by adopting regulations which minimize their adverse effects.
 - **Policy 6.7.7.1:** The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the EDCAQMD *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under CEQA*, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide. The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.
- **Implementation Measure HS-T:** Adopt and/or update air quality regulations regarding agricultural and fuel reduction burning, construction emissions, mobile source emissions, fugitive dust, and volatile organic emissions. [Policy 6.7.7.1]

- **Implementation Measure HS-X:** Coordinate air quality planning efforts with other local and regional agencies. [Policies 6.7.1.1 and 6.7.1.2]

City of Placerville City Code

Chapter 8.7, *Grading Ordinance*, sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of plans and inspection of grading construction and all grading specific to single parcel site improvements, except single-family residence construction unless exceeding prescriptive standards as defined in the City's design and improvement standards manual. Where the grading or earthwork involves multiple parcels, parcel maps, subdivisions, land divisions, or roads the design and improvement standards manual shall be used for design purposes.

City of South Lake Tahoe City Code

Chapter 7.20, *Grading, Erosion and Sediment Control*, is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) To avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and (3) To ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and state or federal law, this chapter shall prevail unless preempted by the state or federal law. In the event of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Air quality is addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goal and policies that apply to the Project:

- **Goal NCR-5:** To incorporate air quality improvements and emission reductions directly with land use and transportation planning.
 - **Policy NCR-5.10: Air Quality-Related Construction Mitigation.** The City of South Lake Tahoe shall require discretionary projects that have a significant air quality impact to provide construction mitigation to address short-term construction emissions below EDCAQMD thresholds as part of the review of the project application. This excludes building permits for single-family residential units. This may include the following measures:
 - a. Measures currently recommended by the EDCAQMD;
 - b. Prohibition of open burning of debris from site clearing unless involved with a fuels reduction project;

- c. Utilization of low-emission construction equipment and/or fuels; d. Implementation of best management practices in concert with water quality protection measures; and/or
- d. Restriction of idling of construction equipment or vehicles.

4.3.1.6 Existing Conditions

Physical Environment

Air quality conditions in the County are determined by natural factors such as topography, meteorology, and climate, coupled with atmospheric stability conditions and the presence of inversions. El Dorado County has two distinct air quality environments, which have been recognized formally by division of the County into two separate air basins, the MCAB and LTAB (County 2003). The following factors affecting air quality conditions with respect to the MCAB and LTAB are discussed in detail below.

Mountain Counties Air Basin

Topography

The MCAB, an area of approximately 11,000 square miles, consists of Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa counties, in addition to the west slope of El Dorado County and the central portion of Placer County. The majority of the MCAB is located in the northern Sierra Nevada area with the western boundary of the basin extending into the Sacramento Valley. The topography in the MCAB is quite variable because of mountain peaks and valleys that differ substantially in elevation from approximately 100 to 10,000 feet (County 2003).

Meteorology

The annual temperature, humidity, precipitation, and wind patterns reflect the topography of the MCAB and the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, in the western portion of the MCAB, temperatures that often exceed 100°F coupled with clear sky conditions are favorable for ozone formation. The majority of the precipitation in the Sacramento Valley occurs during the winter. Winds and unstable atmospheric conditions associated with the passage of winter storms result in periods of low air pollution and excellent visibility. However, between winter storms, high pressure and light winds lead to the creation of low-level temperature inversions and stable atmospheric conditions, resulting in high concentrations of carbon monoxide and particulate matter (County 2003).

Lake Tahoe Air Basin

Topography

The LTAB consists of the eastern portion of El Dorado County, the eastern portion of Placer County, and Lake Tahoe. Lake Tahoe lies in a depression between the crests of the Sierra Nevada and Carson ranges on the California-Nevada border at a surface elevation of 6,260 feet above sea level. The LTAB is defined by the area within the 7,000-foot contour, which is continuous around the lake, and Tahoe City. The mountains surrounding the lake average approximately 8,000 to 9,000 feet in height (County 2003).

Meteorology

The constant 39°F (4°C) water temperature of Lake Tahoe at depths below 600 feet, coupled with the location of the lake within a basin surrounded by mountains with dramatic vertical relief, defines the first meteorological regime. A regime is a meteorological pattern that occurs regularly, such as seasonal rainfall. In the absence of a weather system such as a high- or low-pressure area, this regime develops shallow subsidence and radiation inversions throughout the year. In addition, radiation (nocturnal) inversions, which are defined as increases in temperature with height resulting from the cooling of the earth's surface at night, regularly cause gentle downslope winds from the mountain ridges down to the shore and then fan across the lake (County 2003).

The second meteorological regime is defined by the movement of mountain upslope winds from the Sacramento Valley and San Francisco Bay area into the Lake Tahoe Basin that result from the topographic location of Lake Tahoe directly east of the Sierra Nevada crest. This pattern develops when the western slopes of the Sierra Nevada are heated, causing the air to rise in a chimney effect and move upslope to the Sierra crest and over into the LTAB. The strength of this pattern depends on the amount of heating, and thus is strongest in summer, beginning in April and essentially ceasing in late October (County 2003).

Other regimes in the LTAB are defined by strong weather patterns that overcome the dominant terrain-defined meteorology regimes discussed above. The most important is the winter storm regime, which is responsible for precipitation primarily in the form of snow. Each of the meteorological regimes has the potential to influence pollution concentrations within the LTAB. Pollution concentrations typically increase during local inversions, which trap emissions within the LTAB and allow for the transportation of pollution from the western slopes of the Sierra Nevada, the Sacramento Valley, and the San Francisco Bay area. On the other hand, low pollution concentrations are associated with winter storms and high winds. Winter storms dilute the local and upwind pollution with strong vertical mixing and the incorporation of clean North Pacific air (County 2003).

Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, known as sensitive receptors, such as children under 14, the elderly over 65, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptor locations. Examples of these sensitive receptor locations are residences, schools, hospitals, and daycare centers which are located throughout the County.

4.3.2 Methodology

Criteria pollutant and precursor emissions for the Project construction activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1. CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was

developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The model calculates emissions of criteria pollutants, Ozone precursors, and greenhouse gases, including PM₁₀, PM_{2.5}, ROGs, NO_x, and carbon dioxide equivalents (CO₂e). The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices C, D, and G (CAPCOA 2024). The input data and subsequent construction and operation emission estimates for the proposed Project are discussed below. The CalEEMod output files are included in Appendix E to this program EIR.

4.3.2.1 Construction Emissions

It is anticipated that construction of individual fiber projects would occur beginning in Spring 2025. Construction emissions were calculated using CalEEMod based on various construction methods that would be used to construct individual fiber projects. Construction methods include horizontal directional drilling, plowing, trenching, microtrenching, line installation, aerial stringing, and pavement repair. It is assumed that each construction method would be completed in one day for each individual fiber project. Daily construction emissions were estimated for each construction method based on the construction equipment shown in Table 4.3-4.

**Table 4.3-4
CONSTRUCTION EQUIPMENT ASSUMPTIONS**

Equipment	Horsepower	Number	Hours per Day
Horizontal Directional Drilling			
Bore/Drill Rigs	83	1	8
Cranes	367	1	8
Generator Sets	14	1	8
Excavators	36	1	8
Tractors/Loaders/Backhoes	84	1	8
Plowing			
Crawler Tractors	87	1	8
Line Installation			
Air Compressors	37	1	8
Generator Sets	14	1	8
Aerial Stringing			
Bore/Drill Rigs	83	1	8
Cranes	367	1	8
Rough Terrain Forklifts	96	1	8
Tractors/Loaders/Backhoes	84	1	8
Microtrenching			
Trenchers	40	1	8
Tractors/Loaders/Backhoes	84	1	8
Trenching			
Concrete/Individual Saws	33	1	8
Excavators	36	2	8
Tractors/Loaders/Backhoes	84	2	8

Equipment	Horsepower	Number	Hours per Day
Pavement Repair			
Tractors/Loaders/Backhoes	84	1	8
Rollers	36	1	8
Cement and Mortar Mixes	10	1	8

Source: CalEEMod (output data is provided in Appendix E).

Construction traffic would primarily include the delivery of construction equipment, vehicles, and materials including fiber optic cable, utility poles, and daily construction worker trips. Equipment, materials, and labor would likely come from the El Dorado County area; however, it is possible that some equipment, materials, and labor would need to come from outside areas due to the rural nature of the County. Construction activities would be temporary and short-term in nature and would vary day to day depending on the construction method. It is assumed that all roads used for construction methods would be paved.

4.3.2.2 Operation Emissions

Operation of the individual fiber projects under the Project would not result in a population increase and would not generate new vehicle trips beyond occasional maintenance activities. Individual fiber projects would produce negligible operational emissions due to the limited number of maintenance trips and therefore, operational emissions were not calculated.

4.3.3 Significance Thresholds

The impact analysis provided below is based on the application of the following State CEQA Guidelines Appendix G thresholds of significance, which indicate that the Project would have a significant air quality impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; and,
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Appendix G of the State CEQA Guidelines states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. The EDCAQMD has developed thresholds of significance for mass emissions of ROG and NO_x, which lead agencies within their jurisdiction can use to evaluate the air pollutant emissions impacts of land use projects. The same criteria for ROG and NO_x are considered appropriate for the LTAB portion of the County as well as the MCAB portion. However, for any individual fiber project in the Lake Tahoe region, individual fiber project proponents and lead agencies are advised to check separately with TRPA for any special TRPA requirements imposed by that agency under CEQA for determining the significance of projects within the TRPA jurisdiction. These criteria pollutant and precursor thresholds and other assessment recommendations are contained in EDCAQMD's Guide to Air Quality Assessment (EDCAQMD 2002).

The EDCAQMD has not adopted thresholds of significance for a project's construction- or operational-period emissions of PM₁₀ or PM_{2.5}. Because the Project area is close to the border of the SMAQMD jurisdiction, the PM₁₀ and PM_{2.5} thresholds adopted by the SMAQMD in their *Thresholds of Significance Table* are used to determine the significance of the proposed Project PM emissions (SMAQMD 2020). The SMAQMD PM thresholds require the implementation of all feasible BMPs.

Table 4.3-5 presents the EDCAQMD ROG and NO_x significance thresholds and the SMAQMD PM₁₀ and PM_{2.5} thresholds. A project with daily emission rates below these thresholds would be considered to have a less than significant impact on air quality.

**Table 4.3-5
AIR QUALITY SIGNIFICANCE THRESHOLDS**

Maximum Daily Emissions Thresholds (pounds per day)		
Pollutant	Construction	Operation
ROG ¹	82	82
NO _x ¹	82	82
CO	None	None
SO _x	None	None
PM ₁₀ ²	80	80
PM _{2.5} ²	82	82

Source: ¹ EDCAQMD 2002; ² SMAQMD 2020

ROG: reactive organic gas; NO_x: nitrogen oxides; CO: carbon monoxide; PM₁₀: coarse particulate matter with a diameter of 10 microns or less; PM_{2.5}: fine particulate matter with a diameter of 2.5 microns or less; SO_x: sulfur oxides

4.3.4 Impact Analysis

AQ-1 The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

The applicable air quality plan is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, developed by the air districts in the Sacramento region to bring the region into attainment for the ozone NAAQS and CAAQS. The plan is a joint project between the SMAQMD, EDCAQMD, and three other air districts in the Sacramento region (SMAQMD 2017). The plan includes the western portion of El Dorado County and, thus, a portion of the Project area.

The eastern portion of the County is located within the Lake Tahoe Basin. The Compact, adopted by statute by California, Nevada, and the federal government, created the TRPA, a bi-state agency that has primary land use authority within the basin. The TRPA does not have an air quality plan; however, air quality in the eastern portion of the County is addressed within the Air Quality sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b) and the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011).

EDCAQMD and SMAQMD have established thresholds of significance for a project's criteria pollutant and precursor emissions for both temporary construction-related emissions and long-term operational-related emissions. These significance thresholds have been established to assist lead agencies in determining whether a project may have a significant air quality impact. A project with emissions lower than the thresholds would not conflict with or obstruct the implementation of the districts' air quality plans for the attainment of the applicable NAAQS and CAAQS.

As shown in the discussion for Impact AQ-2 below, the Project's construction and operational-generated emissions of ROG, NO_x, PM₁₀, and PM_{2.5} would not exceed EDCAQMD and SMAQMD thresholds. Therefore, the Project would not conflict with or obstruct the implementation of the applicable air quality plans, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

AQ-2 The proposed project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.

Construction Emissions

The Project's temporary construction emissions were estimated using CalEEMod as described in Section 4.3.2, *Methodology*. The results of the modeling of each construction method emissions of criteria pollutants and ozone precursors are shown in Table 4.3-6. The complete CalEEMod output is provided in Appendix E to this program EIR.

**Table 4.3-6
UNMITIGATED CONSTRUCTION EMISSIONS BY CONSTRUCTION METHOD**

Construction Methods	Pollutant Emissions (pounds per day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Horizontal Directional Drilling	0.8	7.7	9.0	<0.1	0.3	0.3
Plowing	0.3	2.3	2.5	<0.1	0.2	0.2
Trenching	0.6	5.4	7.7	<0.1	0.2	0.2
Microtrenching	0.3	2.4	3.4	<0.1	0.1	0.1
Line Installation	0.3	2.0	2.1	<0.1	0.1	0.1
Aerial Stringing	0.7	7.2	9.6	<0.1	0.2	0.2
Pavement Repair	0.3	2.4	3.2	<0.1	0.1	0.1
<i>EDCAQMD Threshold</i>	<i>82</i>	<i>82</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>
<i>SMAQMD Threshold</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>None</i>	<i>80</i>	<i>82</i>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: CalEEMod (Output data is provided in Appendix E)

As shown in Table 4.3-6, the Project's daily construction emissions for each individual construction method would be significantly less than EDCAQMD and SMAQMD daily thresholds. It is likely that construction could simultaneously occur at various individual fiber project sites, however, the daily combined construction emissions would not exceed EDCAQMD and SMAQMD thresholds. It is assumed that no more than 10 individual fiber project construction sites would be active at one time. Therefore, the Project's construction emissions would not violate any air quality standard or result in a considerable net increase of any criteria pollutant.

Additionally, according to Rule 223-1, any activities associated with plans for grading and construction would require a FDCP. Mitigation Measure AQ-1 would require the preparation of a FDCP and implementation of all construction BMPs included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment (EDCAQMD 2002). With implementation of Mitigation Measure AQ-1, impacts related to construction emissions would be less than significant.

Operation Emissions

Operation of the individual fiber projects under the Project would not result in a population increase and would not generate new vehicle trips beyond occasional maintenance activities. An emergency backup generator may be used at some of the individual fiber sites in the event of a power outage or for routine testing. Monthly routine testing is assumed to last 15 minutes at one time. As routine use of the backup generators would be limited, individual fiber projects would produce minimal operational emissions. The Project's operational emissions would not violate any air quality standard or result in a considerable net increase in any criteria pollutant. Impacts related to operational emissions would be less than significant.

Impact Conclusion

The Project's daily construction emissions for each individual construction method would be significantly less than EDCAQMD and SMAQMD daily thresholds. It is likely that construction could simultaneously occur at various individual fiber project sites, however, the daily combined construction emissions would not exceed EDCAQMD and SMAQMD thresholds. According to Rule 223-1, any activities associated with plans for grading and construction would require a FDCP. Mitigation Measure AQ-1 would require the preparation of a FDCP and implementation of all construction BMPs included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment (EDCAQMD 2002). With implementation of Mitigation Measure AQ-1, impacts related to construction emissions would be less than significant.

Additionally, the operation of the individual fiber projects under the Project would not result in population increase and would not generate new vehicle trips beyond occasional maintenance activities. An emergency backup generator may be used in the event of a power outage or for routine testing. Monthly routine testing is assumed to last 15 minutes at one time. As use of the emergency backup generator would be limited, individual fiber projects would produce minimal operational emissions.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure AQ-1: Prepare a Fugitive Dust Mitigation Plan

The applicant of an individual fiber project shall submit a Fugitive Dust Control Plan (FDCP) to the Air Pollution Control Officer of the El Dorado County Air Quality Management District (EDCAQMD) prior to the start of any construction activity for which a grading permit was issued by El Dorado County or incorporated city within El Dorado County. The FDCP shall implement all construction related best management practices (BMPs) included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment. The FDCP shall be prepared in compliance with EDCAQMD Rule 223-1. Construction activities shall not commence until the Air Pollution Control Officer has approved or conditionally approved the Fugitive Dust Control Plan.

Significance with Mitigation: Less than significant impact.

AQ-3 The proposed project may expose sensitive receptors to substantial pollutant concentrations.

Impacts to sensitive receptors are typically analyzed for CO hot spots and exposure to TACs. An analysis of the Project's potential to expose sensitive receptors to these pollutants is provided below.

Carbon Monoxide Hotspots

Vehicle exhaust is the primary source of CO. In an urban setting, the highest CO concentrations are generally found near congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as distance from the emissions source (i.e., congested intersection) increases. Because CO is a byproduct of incomplete combustion, exhaust emissions are worse when fossil-fueled vehicles are operated inefficiently, such as in stop-and-go traffic or through heavily congested intersections. Because CO disperses rapidly, hot spots are most likely to occur in areas with limited vertical mixing such as tunnels, long underpasses, or below-grade roadways.

The Project would not result in an increase in traffic on the local roadways within the County such that it would impact on the efficiency of roadways and/or intersections. As the Project would not create congestion or delay, there would be no circumstances in which CO hotspots would occur. Therefore, the impact would be less than significant.

Other Localized Pollutants

The dose (of TAC) to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed quantity of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from Office of Environmental Health Hazard Assessment [OEHHHA]) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (OEHHHA 2015). In addition, concentrations of mobile source DPM emissions disperse rapidly and are typically reduced by 70 percent at approximately 500-feet (CARB 2005). Considering this information, the highly dispersive nature of DPM, and the fact that construction activities at any single location would be short-term and temporary, it is not anticipated that construction of the Project would expose sensitive receptors to substantial DPM concentrations. Therefore, individual fiber projects would not result in the exposure to elevated pollutant levels from vehicular exhaust. The impact would be less than significant.

As mentioned in Section 4.3.1, *Environmental Setting*, asbestos dust is a known carcinogen and is classified as a TAC by CARB. Some areas of the County area are known to contain NOA. See Figure 4.3-1 for a map of the known areas of NOA, areas likely to contain NOA, and buffer zones for known and likely NOA areas. Individual fiber projects under the Project may be located within known areas of NOA, areas classified as more likely to contain asbestos, or within the quarter mile buffer more likely to contain asbestos or fault line. As outlined in EDCAQMD 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 disturbed, then the Air Pollution Control Officer may provide

an exemption from this Rule. If a geological evaluation has not been conducted, then an owner/operator would submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity.

Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer. With implementation of Mitigation Measure AQ-2, the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure AQ-2: Prepare an Asbestos Dust Mitigation Plan

If naturally occurring asbestos, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer, then an Asbestos Dust Mitigation Plan shall be prepared and submitted to the Air Pollution Control Officer prior to construction. The Asbestos Dust Mitigation Plan shall be prepared in compliance with El Dorado County Air Quality Management District (EDCAQMD) Rule 223-2. Construction activities shall not commence until the Air Pollution Control Officer has approved or conditionally approved the Asbestos Dust Mitigation Plan. 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 disturbed, then the Air Pollution Control Officer shall provide an exemption from EDCAQMD Rule 223-2.

Significance with Mitigation: Less than significant impact.

AQ-4 The proposed project would not result in emissions of odors adversely affecting a substantial number of people.

Common sources of odors include wastewater treatment plants, landfills, transfer stations, composting facilities, refineries, chemical plants, and food processing plants (EDCAQMD 2002).

Construction Emissions

Construction of individual fiber projects may require the use of diesel-powered equipment. Diesel exhaust can be a temporary source of odors. Due to the temporary and intermittent nature of construction methods, construction of individual fiber projects would not result in emissions leading to odors that would adversely affect substantial numbers of people. Impacts would be less than significant related to construction.

Operation Emissions

Broadband infrastructure is not considered to be a typical significant source of objectionable odors. Therefore, individual fiber projects would not result in emissions leading to odors that would adversely affect substantial numbers of people. No impacts would occur related to operation.

Significance without Mitigation: Less than significant impact.

4.3.5 Cumulative Impacts

AQ-5 The proposed project may contribute to a cumulatively considerable impact on regional air quality.

The cumulative air quality setting is the MCAB and the LTAB and their anticipated growth. The western portion of El Dorado County, within the MCAB, is designated as nonattainment for Ozone and PM₁₀ with respect to the CAAQS and is designated as nonattainment for Ozone (8-hour) and PM_{2.5} with respect to NAAQS. The portion of El Dorado County within the LTAB is designated as nonattainment for Ozone, PM₁₀, and CO with respect to the CAAQS and is designated as nonattainment for Ozone (8-hour) with respect to NAAQS. Thus, for this cumulative analysis the MCAB, LTAB, and the regions that affect air quality within El Dorado County define the geographic context.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards in the MCAB or LTAB. Instead, a project's individual emissions of criteria pollutants and precursors contribute to existing cumulatively significant adverse air quality impacts in the EDCAQMD. The proposed Project would not result in significant impacts related to construction- or operations-related emission of criteria pollutants. EDCAQMD establishes thresholds designed to help the basin achieve state ambient air quality standards; therefore, because the proposed Project would not exceed those thresholds, the cumulative impact related to air quality is not significant. Mitigation Measure AQ-1 would require the preparation of a FDCP and implementation of all construction BMPs included in Appendix C-1, Tables C.4 and C.5 of the EDCAQMD Guide to Air Quality Assessment (EDCAQMD 2002). With implementation of Mitigation Measure AQ-1, impacts related to construction emissions would be less than significant. Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer. Implementation of Mitigation Measures AQ-2 would ensure that potential impacts from NOA released during construction of the Project would be less than cumulatively considerable.

Significance without Mitigation: Potentially significant impact.

See Impact AQ-2 for Mitigation Measure AQ-1 and Impact AQ-3 for Mitigation Measure AQ-2.

Significance with Mitigation: Less than significant impact.

4.3.6 References

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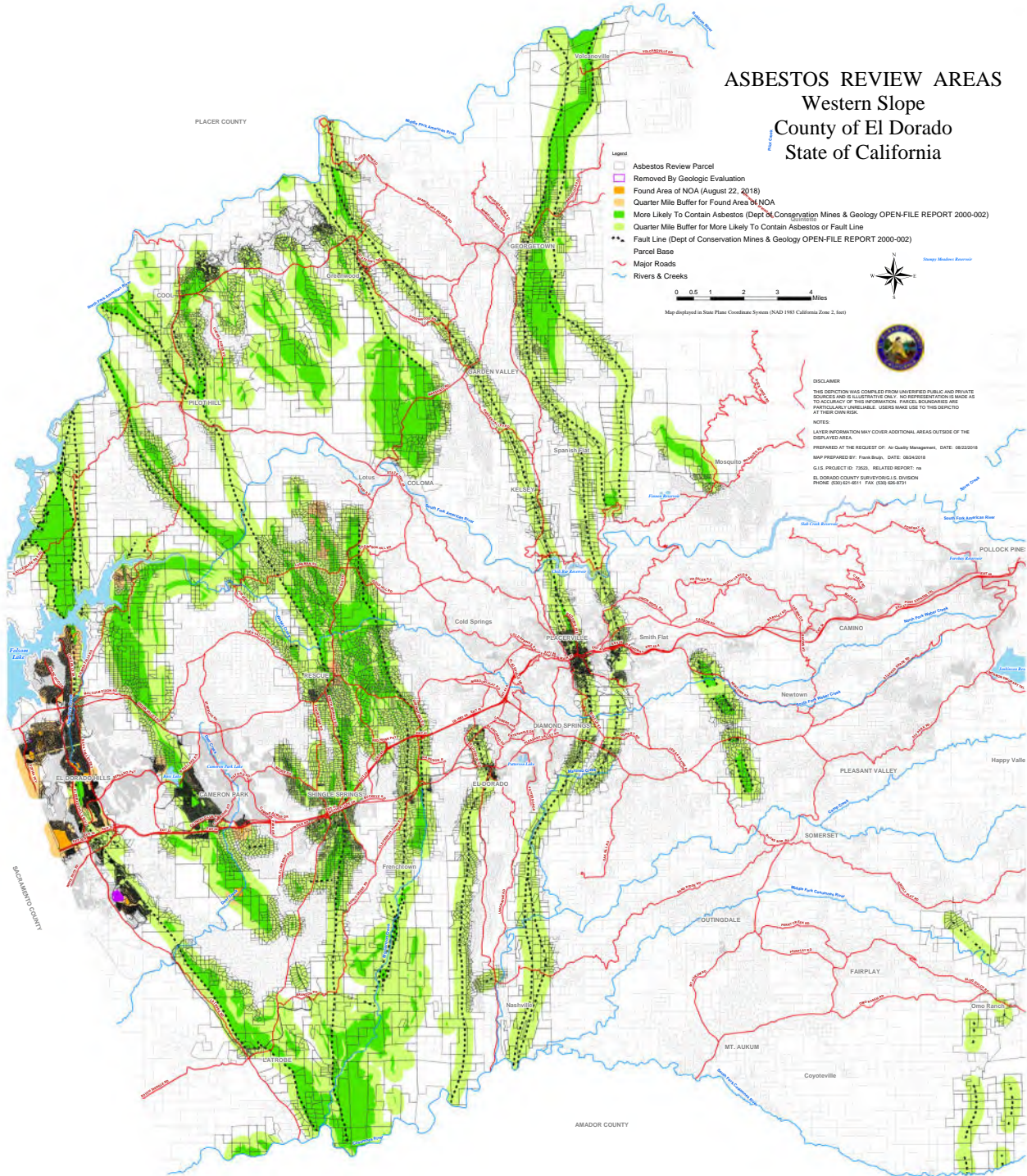
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Source: El Dorado County

4.4 BIOLOGICAL RESOURCES

This section describes the regulatory framework and existing conditions related to biological resources and evaluates the potential impacts that could occur due to implementation of the proposed Project. The potential effects on biological resources were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance.

On September 30, 2024, the Central Valley Regional Water Quality Control Board (CVRWQCB) sent a letter to El Dorado County Economic Development Department to provide comments on the El Dorado County Broadband Fiber Project Environmental Impact Report (EIR). CVRWQCB noted that the EIR should evaluate potential impacts to both surface and groundwater quality. CVRWQCB also included permitting requirements for the Construction Storm Water General Permit, Clean Water Act (CWA) Section 404 Permit, Clean Water Act Section 401 Permit – Water Quality Certification, Waste Discharge Requirements – Dischargers to Waters of the State, Dewatering Permit, and National Pollutant Discharge Elimination System (NPDES) Permit. The Notice of Preparation (NOP) public comments letters are included in Appendix C.

4.4.1 Environmental Setting

4.4.1.1 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for biological resources. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) enforces the provisions stipulated within the federal Endangered Species Act of 1973 (FESA; 16 United States Code [USC] 1531 et seq.). Species identified as federally threatened or endangered (50 CFR 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the study area and determine whether the proposed project will jeopardize the continued existence of or result in the destruction or adverse modification of critical habitat of such species (16 USC 1536 (a)[3], [4]). Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review under the National Environmental Policy Act (NEPA) or CEQA, although they are not otherwise protected under FESA.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. The Migratory Bird Treaty Reform Act of 2004 further defined species protected under the act and excluded all non-native species. Section 16 U.S.C. 703–712 of the MBTA, as reformed, states “unless and except as permitted by regulations, it shall be unlawful at

any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill” a migratory bird. A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. Currently, there are 836 migratory birds protected nationwide by the MBTA, of which 58 are legal to hunt. The U.S. Court of Appeals for the 9th Circuit (with jurisdiction over California) has ruled that the MBTA does not prohibit incidental take (952 F 2d 297 – Court of Appeals, 9th Circuit 1991).

The Bald and Golden Eagle Protection Act

The bald eagle and golden eagle are federally protected under the Bald and Golden Eagle Protection Act (16 USC 668–668c). It is illegal to take, possess, sell, purchase, barter, offer to sell or purchase or barter, transport, export, or import at any time or in any manner a bald or golden eagle, alive or dead; or any part, nest, or egg of these eagles unless authorized by the Secretary of the Interior. Violations are subject to fines and/or imprisonment for up to one year. Active nest sites are also protected from disturbance during the breeding season.

Clean Water Act (33 USC 1252-1376)

On May 25, 2023, the U.S. Supreme Court issued a decision in the case of *Sackett v. Environmental Protection Agency* (Supreme Court of the U.S. 2023) which will ultimately influence how federal waters are defined. The May 25, 2023, Supreme Court decision in *Sackett v. Environmental Protection Agency* determined that “the CWA extends to only those ‘wetlands with a continuous surface connection to bodies that are “waters of the U.S.” in their own right,’ so that they are ‘indistinguishable’ from those waters.” The U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers after review issued a final rule to replace the 2023 rule that amends the “Revised Definition of “Waters of the U.S.” to conform key aspects of the regulatory text to the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*.

Unless considered an exempt activity under Section 404(f) of the federal CWA, any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, State, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

Federal and State regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a State certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S. This system is the NPDES program, administered by the USEPA, that has granted oversight authority in California to the State Water Board through its RWQCBs.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA), established under California Fish and Game Code §2050 et. seq., identifies measures to ensure that endangered species and their habitats are conserved, protected, restored, and enhanced. The CESA restricts the “take” of plant and wildlife species listed by the State as endangered or threatened, as well as candidates for listing. Section 86 of the Fish and Game Code defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Under §2081(b) of the Fish and Game Code, California Department of Fish and Wildlife (CDFW) has the authority to issue permits for incidental take for otherwise lawful activities. Under this section, CDFW may authorize incidental take, but the take must be minimal, and permittees must fully mitigate project impacts. CDFW cannot issue permits for projects that would jeopardize the continued existence of state listed species. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

CDFW maintains lists of Candidate-Endangered Species and Candidate-Threatened Species. Candidate species and listed species are given equal protection under the law. CDFW also lists Species of Special Concern (SSC) based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Designation of SSC is intended by the CDFW to be used as a management tool for consideration in future land use decisions; these species do not receive protection under the CESA or any section of the California Fish and Game Code, and do not necessarily meet CEQA Guidelines §15380 criteria as rare, threatened, endangered, or of other public concern. The determination of significance for SSC must be made on a case-by-case basis. CDFW typically requests that CEQA lead agencies consider minimization of impacts to SSC species when approving projects.

California Code of Regulations Title 14 and California Fish and Game Code

The official listing of endangered and threatened animals and plants is contained in the California Code of Regulations Title 14 §670.5. A state candidate species is one that the California Fish and Game Code has formally noticed as being under review by CDFW to include in the state list pursuant to Sections 2074.2 and 2075.5 of the California Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as “fully protected animals.” These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully

protected species when activities are proposed in areas inhabited by these species. CDFW has informed non-federal agencies and private parties that they must avoid take of any fully protected species in carrying out projects. However, Senate Bill 618 (2011) allows the CDFW to issue permits authorizing the incidental take of fully protected species under the CESA, so long as any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

California Environmental Quality Act

Under CEQA (1970, as amended PRC Section 21000 et seq.), lead agencies analyze whether projects would have a substantial adverse effect on a candidate, sensitive, or special-status species (PRC Section 21001(c)). These “special status” species generally include those listed under FESA and CESA, and species that are not currently protected by statute or regulation, but would be considered rare, threatened, or endangered under the criteria included CEQA Guidelines Section 15380. Therefore, species that are considered rare are addressed in this study regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity; plants with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, and 3 are generally considered special-status species under CEQA (CNPS 2024a).

Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or State list of protected species may be considered rare if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380(d) of the CEQA Guidelines allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

Nesting Birds (California Fish and Game Code Sections 3503, 3511, and 3800)

California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, take, or needless destruction of birds, their nests, and eggs, and the salvage of dead nongame birds. California Fish and Game Code Subsection 3503.5 protects all birds in the orders of Falconiformes and Strigiformes (birds of prey). Fish and Game Code Subsection 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Fish and Game Code Subsection 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. The Attorney General of California has released an opinion that the Fish and Game Code prohibits incidental take.

California Native Plant Protection Act (California Fish and Game Code Sections 1900-1913)

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use other than

changing from one agricultural use to another, which allows CDFW to salvage listed plants that would otherwise be destroyed.

CNPS is a non-governmental conservation organization that has developed a list of plants of special concern in California. The following explains the designations for each plant species (CNPS 2024a).

- Rare Plant Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
- Rare Plant Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere
- Rare Plant Rank 2A – Plants Presumed Extirpated in California, but Common Elsewhere
- Rare Plant Rank 2B – Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
- Rare Plant Rank 3 – Plants About Which More Information is Needed- A Review List
- Rare Plant Rank 4 – Plants of Limited Distribution – A Watch List

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants with a CRPR of 1A, 1B, 2A, and 2B are be considered to meet the definition of endangered, rare, or threatened species under Section 15380(d) of CEQA (see above) and impacts to these species may be considered “significant.”

Waters of the State

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the Clean Water Act is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California’s water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within waters of the U.S., and now also implements the State’s wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

In 2019 the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and, 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The SWRCB circulated final implementation Guidance on the Procedures in 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the State.” Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California’s statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

California Fish and Game Code Section 1600

Under the California Fish and Game Code, the CDFW provides protection from “take” for a variety of species. The CDFW also protects streams, water bodies, and riparian corridors through the Streambed Alteration Agreement (SAA) process under Section 1601 to 1606 of the California Fish and Game Code. The California Fish and Game Code stipulates that it is “unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake” without notifying the CDFW, incorporating necessary mitigation, and obtaining a SAA. CDFW’s jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover. Impacts to riparian vegetation are regulated through the Lake and Streambed Alteration program. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) establishes a management system for national marine and estuarine fishery resources. The MSA applies to Pacific salmon, groundfish, and several pelagic species found in the Pacific Ocean and San Francisco Bay and Delta and pertains to federal agencies that carry out projects with the potential to affect Essential Fish Habitat (EFH). Essential fish habitat is defined as those waters and substrate necessary for fish spawning, breeding, feeding, or growth to maturity. For the purposes of interpreting the definition of EFH, “waters” include aquatic areas and their associated physical, chemical, and biological properties that are used by fish, and may include areas historically used by fish where appropriate; “substrate” includes sediment, hard bottom, structures underlying the waters, and associated biological communities; “necessary” means habitat required to support a sustainable fishery and a healthy ecosystem; and “spawning, breeding, feeding, or growth to maturity” covers a species’ full life cycle.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California’s statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically

update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals. Projects that do not require a federal permit may still require review and approval by the RWQCB. The RWQCB focuses on ensuring that projects do not adversely affect the “beneficial uses” associated with waters of the State. In most cases, the RWQCB requires the integration of water quality control measures into projects that will require discharge into waters of the State. For most construction projects, the RWQCB requires the use of construction and post-construction best management practices.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe’s importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances may apply to the Project:

Chapter 33, *Grading and Construction*, applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction. Section 33.6, *Vegetation Protection During Construction*, states that vegetation shall not be disturbed, injured, or removed except in accordance with the Code or conditions of project approval. All trees, major roots, and other vegetation, not specifically designated and approved for removal in connection with a project shall be protected according to methods approved by TRPA. All vegetation outside the construction site boundary, as well as other vegetation designated on the approved plans, shall be protected by installing temporary fencing pursuant to subsections.

Chapter 60, *Water Quality*, sets forth standards for the discharge of runoff water from parcels and regulates the discharge of domestic, municipal, or industrial wastewater. These standards and prohibitions apply to discharges to both surface waters and ground waters.

Chapter 61, *Vegetation and Forest Health*, regulates the management of forest resources to achieve and maintain the environmental threshold standards for species and structural diversity, to promote the long-term health of natural resources, to restore and maintain suitable habitats for native wildlife species, and to reduce accumulations of hazardous fuels to decrease the likelihood of catastrophic wildfire events. TRPA requires the protection and maintenance of all native vegetation types. TRPA may require the preparation and implementation of a remedial vegetation management plan for any parcel

where the need for remedial vegetation management has been identified for purposes of environmental threshold maintenance or attainment

Chapter 62, *Wildlife Resources*, aims to protect and enhance the existing diverse wildlife habitats, with special emphasis on protecting or increasing habitats of special significance, such as deciduous trees, wetlands, meadows, and riparian areas. This chapter applies to any activity or project that could affect basic habitat requirements, such as hiding and thermal cover, food, water, and space as necessary for survival of wildlife populations. Standards for the preservation and management of wildlife habitat are set forth in this chapter.

Chapter 63, *Fish Resources*, ensures the protection of fish habitat and to provide for the enhancement of degraded habitat. This chapter is applicable to all projects and activities that could interfere with the health of fish populations in Lake Tahoe, its tributaries, and other lakes in the region. New uses, projects and activities within fish habitat, as identified by TRPA fish habitat maps or a qualified biologist, shall include provisions for the protection or enhancement of the affected habitat.

The Shorezone Subelement, Conservation Element of the Goals and Policies identifies special qualities, including physical, biological and visual, that shall be considered when reviewing a project in the shorezone or lakezone. In accordance with those policies, Chapter 80, *Review of Projects in the Shorezone and Lakezone*, sets forth findings that must be made by TRPA prior to approving a project in the shorezone or lakezone. All projects and activities in lagoons or the shorezone or lakezone of any lake in the region shall comply with the provisions of this chapter.

TRPA Regional Plan

Biological resources are addressed within the Vegetation Subelement and Wildlife Subelement of the *Conservation Element* of the TRPA Regional Plan (TRPA 2024b).

The Vegetation Subelement contains the following goals and policy that apply to the proposed Project:

- **Goal VEG-1:** Provide for a wide mix and increased diversity of plant communities in the Lake Tahoe region. The natural succession of vegetation in the region has been stifled over the past 130 years. Following clear cut activities in the late 1800s, the forest vegetation has been managed under wildfire exclusion policies. The resulting lack of naturally occurring fires and other natural perturbations has created an unnatural forest structure to forest health and diversity. Extensive and overstocked stands of second growth conifers now dominate the forest vegetation. Other plant communities that require openings in the forest canopy are relatively scarce. The resulting situation is one of low plant diversity, poor age class structure, vulnerability to disease and pest organisms and increased risk of catastrophic wildfire. The preservation of the region's vegetation and the achievement of environmental thresholds require programs that preserve or protect certain plant communities and species while permitting increased opportunities to manage the vegetation for diversity, fire prevention, and health. Attainment of these thresholds requires an on-going program involving harvest of fire fuels, revegetation, and vegetation manipulation.
 - **Policy VEG-1.9:** All proposed actions shall consider the cumulative impact of vegetation removal with respect to plant diversity and abundance, wildlife habitat and movement, soil productivity and stability, and water quality and quantity. The piecemeal and incremental removal of vegetation may have significant cumulative impacts on the

natural resource values of the region. Project review should consider both the direct and indirect impacts of all development, as well as fire safety.

- **Goal VEG-2:** Provide for the protection, maintenance, and restoration of such unique ecosystems as wetlands, meadows, and other riparian vegetation. Riparian vegetation is a critical component of the Tahoe region's natural vegetation. These communities serve a variety of useful functions especially related to water quality and quantity. Riparian plant communities also significantly contribute to plant and animal diversity, recreation, and scenic quality. Strategies to protect these qualities are developed within the framework of adopted environmental thresholds for soils, vegetation, and wildlife.

The Wildlife Subelement contains the following goal and policy that apply to the Project:

- **Goal WL-1:** Maintain suitable habitats for all indigenous species of wildlife without preference to game or non-game species through maintenance and improvements of habitat diversity. The emphasis of wildlife management in the Region should be on maintaining and improving the functional and biological characteristics of the ecosystem to support the needs of wildlife.
 - **Policy WL-1.1:** All proposed actions shall consider impacts to wildlife. The impacts of development to wildlife can often be easily mitigated when wildlife are considered early in the project review process. Consideration should be given to the movement, water, food, and cover needs of wildlife.

Sierra Nevada Forest Plan

The Sierra Nevada Forest Plan provides federal direction on habitat management for 11 National Forests: Modoc, Lassen, Plumas, Lake Tahoe Basin, Tahoe, Eldorado, Stanislaus, Sequoia, Sierra, Inyo, and portions of Humboldt-Toiyabe. The goal of the forest plan is to manage sensitive wildlife habitat cautiously and provide for species conservation while addressing the needs of forest managers to reduce the threat of wildfire. The Sierra Nevada Forest Plan addresses five objectives for the Sierra Nevada region:

- Preserve and enhance old-forest ecosystems and associated species;
- Identify and implement effective techniques for fire and fuel management;
- Preserve and enhance aquatic, riparian, and meadow ecosystems and associated species;
- Manage noxious weeds; and,
- Sustain lower-westside hardwood forest ecosystems.

In the early 1990s, in response to the declining population of spotted owls (*Strix occidentalis*) in California, the U.S. Forest Service (USFS) Pacific Southwest Region began a habitat management planning effort that encompassed the entire Sierra Nevada region. The result was a long-term management plan for owl habitat and other natural resources in the Sierra Nevada and Modoc Plateau.

The Sierra Nevada Framework for Conservation and Collaboration is an effort begun in 1998 by the USFS to integrate the latest science and a collaborative approach into national forest management. Work by the framework resulted in a federal environmental document known as the Sierra Nevada Forest Plan Amendment (SNFPA), published in 2001. The SNFPA describes nine alternatives to address five problem

areas in Sierra Nevada national forests: old-forest ecosystems; aquatic, riparian, and meadow ecosystems; fire and fuel management; noxious weeds; and, lower-westside hardwood ecosystems (City of South Lake Tahoe 2010).

Eldorado National Forest Land and Resource Management Plan

The Eldorado National Forest Land and Resource Management Plan (Plan) was prepared by the USFS in 1988. The Plan covers approximately 786,994 acres of forestland in parts of Alpine, Amador, El Dorado, and Placer counties, including both National Forest and forestlands in other ownership. The Plan prescribes compatible sets of forest practices for various types of land and resources divided by management areas and contains targets for the production of market and nonmarket goods and services. As a result of the SNFPA, the National Forest Land and Resource Management Plans of various National Forests, including the Eldorado National Forest Plan, are now being revised to bring their management practices and guidelines into conformance with the policies of that document (City of South Lake Tahoe 2010).

Forest Practice Act

The California Department of Forestry and Fire Protection (CAL FIRE) administers the Forest Practice Act that regulates logging on privately owned lands in California. The Forest Practice Act was enacted to ensure that logging is done in a manner that will preserve and protect California's fish, wildlife, forests, and streams. Additional forest practice rules enacted by the State Board of Forestry and Fire Protection are also enforced to protect these resources. CAL FIRE requires the preparation of an environmental review document, called a Timber Harvesting Plan, prior to removing trees on parcels greater than three acres in size for commercial purposes. Cutting or removing trees during the conversion of timberlands to land uses other than the growing of trees is considered a commercial operation by forest practice rules. In addition, a Timberland Conversion Permit or a Notice of Exemption from Timberland Conversion for Subdivision Permit is required when converting timberland to a non-timber growing use (City of South Lake Tahoe 2010).

Local Regulations

El Dorado County Oak Resources Management Plan

The County's Oak Resources Management Plan (ORMP) defines mitigation requirements for impacts to oak resources (oak woodlands, individual native oak trees, and heritage trees) and to outline the County's strategy for oak woodland conservation. The ORMP functions as the oak resources component of the County's biological resources mitigation program, identified in General Plan Policy 7.4.2.8. The ORMP identifies standards for oak woodland and native oak tree impact determination, mechanisms to mitigate oak woodland and native oak tree impacts, technical report submittal requirements, minimum qualifications for technical report preparation, mitigation monitoring and reporting requirements, and projects or actions that are exempt from mitigation requirements (County 2017a).

El Dorado County Code

Chapter 8.79, *Stormwater Quality*, is intended to ensure the County is compliant with State and federal laws; protect the health, safety, and general welfare of the citizens of El Dorado County; enhance and protect the quality of waters of the State in El Dorado County by reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to a

stormwater facility; and require use of best management practices (BMPs) that will reduce the adverse effects of polluted runoff discharges on waters of the State. The Stormwater Quality Ordinance prohibits illicit discharges to a stormwater facility and establishes authority to adopt requirements for stormwater management and for development projects to reduce stormwater pollution and erosion during construction and operation.

Chapter 110.14, *Grading, Erosion, and Sediment Control*, regulates grading within the unincorporated areas of El Dorado County in order to protect life, limb, health, property and public welfare; avoid pollution of watercourses; and ensure that the intended use of a graded site is consistent with the County's General Plan and any specific adopted plans, including the Western El Dorado County Storm Water Management Plan, State Fire Safe Standards, and relevant County ordinances. The ordinance establishes the procedures for the issuance of grading permits, approval of plans, and inspection of construction sites. The ordinance also requires that waterways and adjacent properties be protected from erosion, flooding, or sediment deposits that could result from grading activities.

Section 130.30.050 of Article 3, *Site Planning and Project Design Standards*, of the County Zoning Ordinance establishes standards for avoidance and minimization of impacts to wetlands and sensitive riparian habitat. This section of the Zoning Ordinance applies to discretionary projects adjacent to perennial streams, intermittent streams, wetlands, or any sensitive riparian habitat within El Dorado County. The Zoning Ordinance requires new development to avoid or minimize impacts to these habitat types. If the habitats cannot be avoided, the County requires an assessment that establishes appropriate buffers to reduce impacts to a less than significant level and mitigation consistent with state or federal permit requirements. The County has established standardized setbacks of 25 feet from any intermittent stream, wetland or sensitive riparian habitat, or a distance of 50 feet from any perennial lake, river or stream. Storm drain, irrigation outflow structures, and bridges are permitted as long as they are approved by the County as part of the development process.

Chapter 130.39, *Oak Resources Conservation*, of the County Zoning Ordinance requires mitigation for impacts to native oak trees in all portions of unincorporated El Dorado County below 4,000 feet in elevation. The Chapter requires documentation of all oak woodlands, individual native oak trees, and heritage native oak trees (collectively, oak resources) on a site if any oak impacts are proposed on that site. Furthermore, an Oak Resources Technical Report must be prepared as stipulated in the Chapter. Mitigation for impacts to oak resources may be accomplished through payment of an in-lieu fee to the Oak Woodland Conservation Fund, conservation using a deed restriction or conservation easement, and/or replacement planting.

El Dorado County General Plan

Biological resources are addressed within the *Conservation and Open Space Element* of the County's General Plan. The *Conservation and Open Space Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2017b):

- **Goal 7.3: Water Quality and Quantity.** Conserve, enhance, and manage water resources and protect their quality from degradation.
 - **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 BMPs, as identified by the Natural Resources Conservation Service (NRCS), in watershed lands as a means to prevent erosion, siltation, and flooding.
 - **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 USACE Wetland Delineation Manual.
 - **Policy 7.3.3.3:** The County shall develop a database of important surface water features, including lake, river, stream, pond, and wetland resources.
 - **Objective 7.3.4: Drainage.** Protection and utilization of natural drainage patterns.
 - **Policy 7.3.4.2:** Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.
- **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: Pine Hill Rare Plant Species:** The County shall protect Pine Hill rare plant species and their habitats consistent with federal and State laws.
 - **Policy 7.4.1.1:** The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 130.71 and the *USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan*.
 - **Policy 7.4.1.3:** Limit land uses within established Pine Hill rare plant preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.
 - **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 7.4.2.5:** Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.

- **Policy 7.4.2.8:** Conserve contiguous blocks of important habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the County through a Biological Resource Mitigation Program (Program). The Program will result in the conservation of:
 1. Habitats that support special status species;
 2. Aquatic environments including streams, rivers, and lakes;
 3. Wetland and riparian habitat;
 4. Important habitat for migratory deer herds; and,
 5. Large expanses of native vegetation.
- A. **Habitat Protection Strategy.** The Program establishes mitigation ratios to offset impacts to special-status species habitat and special-status vegetation communities within the County. Special-status species include plants and animals in the following categories:
 - Species listed or proposed for listing as Threatened or Endangered under the FESA or CESA;
 - Species considered as candidates for listing as Threatened or Endangered under FESA or CESA;
 - Wildlife species identified by CDFW as Species of Special Concern;
 - Wildlife species identified by USFWS and National Marine Fisheries Service (NMFS) as Species of Concern;
 - Plants listed as Endangered or Rare under the California Native Plant Protection Act;
 - Animals fully protected under the California Fish and Game Code;
 - Plants that have a CNPS California Rare Plant Rank (CRPR) of 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants rare, threatened, or endangered in California and elsewhere), 2A (plants presumed extirpated in California, but more common elsewhere), or 2B (plants rare, threatened, or endangered in California, but more common elsewhere). The CNPS CRPRs are used by both CDFW and USFWS in their consideration of formal species protection under FESA or CESA.

With the exception of oak woodlands, which would be mitigated in accordance with the ORMP, and Pine Hill rare plant species and their habitat, which would be mitigated in accordance with County Code Chapter 130.71, mitigation of impacts to vegetation communities will be implemented in accordance with the table below (See Table 4.4-1). Preservation and creation of the following

vegetation communities will ensure that the current range and distribution of special-status species within the County are maintained.

Table 4.4-1
EL DORADO COUNTY HABITAT MITIGATION SUMMARY TABLE

Vegetation Type	Preservation	Creation	Total
Water	N/A	1:1	1:1
Herbaceous Wetland	1:1	1:1	2:1
Shrub and Tree Wetlands	2:1	1:1	3:1
Upland (non-oak and non-Pine Hill rare plant species habitat)	1:1	N/A	1:1

Source: County 2003

- **Objective 7.4.4: Forest, Oak Woodland, and Tree Resources.** Protect and conserve forest, oak woodland, and tree resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values.
 - **Policy 7.4.4.2:** Through the review of discretionary projects, the County, consistent with any limitations imposed by State law, shall encourage the conservation protection, planting, restoration, and regeneration of native trees in new developments and within existing communities.
 - **Policy 7.4.4.3:** Encourage the clustering of development to retain the largest contiguous areas of forests and oak woodlands possible.
- **Implementation Measure CO-A:** Review the Zoning Ordinance (Title 130 of the El Dorado County Code) to identify revisions that accomplish the following:
 - A. Incorporate tree canopy coverage standards outlined in Policy 7.4.4.4.
- **Implementation Measure CO-G:** Create guidelines for development projects that may affect surface water resources. The guidelines should include:
 - Definition(s) of surface water resources;
 - Criteria for determining the presence of surface water resources;
 - Buffer standards;
 - Mitigation standards; and,
 - Use of Best Management Practices. [Policies 7.3.1.1, 7.3.3.1, and 7.3.4.2]
- **Implementation Measure CO-G:** Create guidelines for development projects that may affect surface water resources. The guidelines should include:
 - Definition(s) of surface water resources;
 - Criteria for determining the presence of surface water resources;
 - Buffer standards;

- Mitigation standards; and,
- Use of BMPs. [Policies 7.3.1.1, 7.3.2.1, 7.3.3.1, 7.3.3.2, and 7.3.4.2]
- **Implementation Measure CO-K:** Work cooperatively with the State Department of Fish and Game, USFWS, and Bureau of Land Management to implement the gabbro soils rare plant ecological preserve and recovery program and to develop a long-term preserve strategy. Develop implementation measures to incorporate in County development standards for ministerial and discretionary projects, which may include:
 - Identification of compatible land uses within preserve sites, which may include passive recreation, research and scientific study, and interpretive education; and,
 - Fuels management and fire protection plans to reduce fire hazards at the interface between rare plant preserve sites and residential land uses. [Policies 7.4.1.1 and 7.4.1.3]
- **Implementation Measure CO-L:** Develop guidelines for the preparation of biological and resources technical reports. [Policy 7.4.2.8]
- **Implementation Measure CO-O:** Prepare and adopt a riparian setback ordinance. The ordinance, which shall be incorporated into the Zoning Code, should address mitigation standards, including permanent protection mechanisms for protected areas, and exceptions to the setback requirements. The ordinance shall be applied to riparian areas associated with any surface water feature (i.e., rivers, streams, lakes, ponds, and wetlands) and should be prepared in coordination with Measure CO-B. [Policy 7.4.2.5]

City of Placerville City Code

Chapter 8.7, *Grading Ordinance*, sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of plans and inspection of grading construction and all grading specific to single parcel site improvements, except single-family residence construction unless exceeding prescriptive standards as defined in the City's design and improvement standards manual. Where the grading or earthwork involves multiple parcels, parcel maps, subdivisions, land divisions, or roads the design and improvement standards manual shall be used for design purposes.

Chapter 7.15, *Stormwater Quality Ordinance*, intends to ensure that the City of Placerville is compliant with State and federal laws and fulfills its requirements to: 1) protect the health, safety, and general welfare of the citizens of the City of Placerville; 2) enhance and protect the quality of waters of the State in the City of Placerville by reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to a stormwater facility; and, 3) to cause the use of BMPs by the City and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the State.

City of Placerville General Plan

Biological resources are addressed within *Section V – Natural, Cultural, and Scenic Resources* of the City of Placerville General Plan (City of Placerville 2004). The *Natural, Cultural, and Scenic Resources* section contains the following goals, policies, and implementation program that apply to the proposed Project:

- **Goal A:** To conserve water resources and protect water quality within the Placerville area.
 - **Policy 5:** The City of Placerville shall require in new development sound anti-pollution practices to protect water quality.
 - **Policy 7:** The City of Placerville shall condition approvals of development in hillside areas to minimize erosion and silt flows into watercourses.
- **Goal D:** To protect the City of Placerville’s natural vegetation and diverse wildlife.
 - **Policy 1:** The City of Placerville shall make every effort to protect riparian vegetation. To this end, buildings and improvements shall be set back from watercourses.
 - **Policy 2:** The City of Placerville shall ensure that channel improvements to and tree and brush clearance activities along creeks within the City do not unnecessarily disturb riparian vegetation.
 - **Policy 9:** The City of Placerville shall seek to protect and manage Placerville’s tree cover to maximize ecological and aesthetic values consistent with the reasonably economic enjoyment of private property. To this end, the City of Placerville shall adopt and enforce a historical tree ordinance.
- **Implementation Program 6:** The City of Placerville shall prepare and adopt a heritage tree ordinance to protect mature trees over a specified size.

City of South Lake Tahoe City Code

Chapter 7.15, *Urban Runoff and Stormwater Quality Management Ordinance*, is enacted to protect and promote the health, safety and general welfare of the citizens of the City and to protect and enhance the water quality, beneficial uses, habitats and ecosystems in receiving waters by reducing pollution and pollutant loads discharged in urban runoff from areas within the City’s jurisdiction by the maximum extent practicable, and by prohibiting non-storm water discharges to municipal storm drain systems. This Chapter is intended to assist in protection and enhancement of watercourses, water bodies (such as Lake Tahoe), and wetlands in a manner pursuant to and both compliant and consistent with the Clean Water Act, Porter-Cologne Water Quality Control Act, and NPDES.

Chapter 7.20, *Grading, Erosion and Sediment Control*, is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) to avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and, (3) to ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and State or federal law, this chapter shall prevail unless preempted by the State or federal law. In the event of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Biological resources are addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goals, policies, and implementation measures that apply to the proposed Project:

- **Goal NCR-2:** To protect and enhance the clarity of Lake Tahoe and water quality in the area's rivers, creeks, and groundwater.
 - **Policy NCR-2.1: Stormwater Runoff Retention.** The City of South Lake Tahoe shall require new projects and, working with TRPA, encourage existing developed properties to retain runoff onsite wherever physically possible and economically efficient or, if not possible or efficient, to contribute to the construction and long-term maintenance of off-site water quality measures.
 - **Policy NCR-2.2: Hazardous Materials.** The City of South Lake Tahoe shall ensure hazardous materials do not reach Lake Tahoe, any of its tributaries, or contaminate Stream Environment Zones (SEZ) or groundwater resources.
- **Goal NCR-3:** To protect, restore, and enhance biological habitats and wildlife species in the City of South Lake Tahoe.
 - **Policy NCR-3.1: Natural Habitat Preservation.** The City of South Lake Tahoe shall protect, maintain, and restore key riparian areas, natural open space meadows, and SEZ for the preservation of natural habitats.
 - **Policy NCR-3.4: Natural Growth Protection.** The City of South Lake Tahoe shall limit the extent of construction to provide a natural growth zone for vegetation.
 - **Policy NCR-3.10: Stream Environment Zone Management.** The City of South Lake Tahoe shall consider stream stability, water quality objectives, fisheries and wildlife, open space, and public health and safety in maintaining or managing SEZ restoration projects.
 - **Policy NCR-3.12: Tree Preservation.** The City of South Lake Tahoe shall adopt a tree preservation ordinance that protects large native trees, trees with historic importance, and trees that support sensitive species and healthy forest habitat.
 - **Policy NCR-3.13: Improving Wildlife Habitat Values.** The City of South Lake Tahoe shall encourage the use of native or compatible non-native, non-invasive plant species as part of project landscaping to improve wildlife habitat values.
- **Implementation Measure IMP-8.4: Tree Preservation Ordinance.** The City of South Lake Tahoe shall prepare and adopt a tree preservation ordinance that protects large native trees, trees with historic importance, and trees that support sensitive species and healthy forest habitat.

- **Implementation Measure IMP-8.8: Riparian Habitat Protection and Restoration.** The City of South Lake Tahoe shall develop a comprehensive strategy to protect and restore key riparian areas and natural features.

4.4.1.2 Existing Conditions

The majority of the broadband infrastructure would be built within the typical roadway cross-section within the unincorporated areas of the County, the incorporated cities of Placerville and South Lake Tahoe, or the California Department of Transportation (Caltrans) rights-of-way (ROW). Broadband infrastructure could also be constructed on private disturbed land and federal land and could connect to existing conduit or utility poles located within public or private utility easements. However, given that the exact alignment of the future broadband infrastructure is currently unknown, the entirety of El Dorado County was conservatively treated as the Project study area as it relates to biological resources. The County includes a wide variety of terrestrial and aquatic habitats that support many common and special-status plant and wildlife species. From its lower elevation, at approximately 108 feet above mean sea level (amsl), the County extends from the Sierra Nevada foothills to the high Sierra Nevada, with its highest peak within the County, Freel Peak, at approximately 10,886 feet amsl. Land uses vary throughout the County and include uses such as agriculture, timber harvest, mining, residential, commercial, industrial, open space, and public lands.

Biological Communities

Biological community mapping provided in Figure 4.4-1, *Biological Communities within the County*, for the County is sourced from the Existing Vegetation (Eveg) data associated with the Classification and Assessment with LANDSAT of Visible Ecology Groupings (CALVEG) Zones 3 (North Sierra) and 5 (Central Valley) (USFS 2014). The CALVEG habitat classification system correlates to other classification systems, such as the California Wildlife Habitat Relationships System (CWHR), which is described in detail in the CWHR publication *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Biological communities within the County broadly include aquatic, herbaceous, shrub, and forest and woodland habitats, as well as developed and non-vegetated lands. Biological communities within the County are listed in Table 4.4-2, below.

Sensitive Biological Resources

Special-Status Species

According to the database queries, a total of 61 regionally occurring special-status plant species and 40 special-status wildlife species are either known to occur or have the potential to occur in El Dorado County and vicinity. Based on published information and literature review, 101 species have potential to occur within El Dorado County. Further details on these species are included in Appendix F. Within El Dorado County, USFWS has mapped two final critical habitat units for California red-legged frog (*Rana draytonii*) and Sierra Nevada yellow-legged frog (*Rana sierrae*). Additionally, NMFS Essential Fish Habitat (EFH) Mapper has EFH for chinook salmon (*Onchorhynchus tshawytscha*) mapped within the County in the Upper Cosumnes watershed (HUC 8-18040013).

**Table 4.4-2
BIOLOGICAL COMMUNITIES IN EL DORADO COUNTY**

Habitat Type¹	Acres in El Dorado County²
<i>Developed and Managed Habitats</i>	
Barren	44,713
Cropland	4,491
Deciduous Orchard	431
Evergreen Orchard	71
Pasture	3
Vineyard	266
Urban	19,704
<i>Aquatic Habitats</i>	
Lacustrine	50,396
Riverine	309
Wet meadow	4,247
<i>Herbaceous Habitats</i>	
Annual Grassland	82,851
Perennial Grassland	14,712
<i>Shrub Habitats</i>	
Alpine Dwarf-Shrub	568
Low Sage	41
Mixed Chaparral	32,707
Montane Chaparral	54,486
Sagebrush	357
Bitterbrush	19
Chamise-Redshank Chaparral	3,731
<i>Forest and Woodland Habitats</i>	
Aspen	372
Blue Oak Woodland	42,606
Blue Oak-Foothill Pine	13,635
Closed-Cone Pine-Cypress	421
Douglas Fir	853
Eastside Pine	111
Eucalyptus	38
Jeffrey Pine	27,618
Juniper	9
Lodgepole Pine	9,560
Montane Hardwood	160,538
Montane Hardwood-Conifer	44,376
Montane Riparian	2,495
Ponderosa Pine	86,318
Red Fir	84,908
Sierran Mixed Conifer	317,245
Subalpine Conifer	12,382
Valley Oak Woodland	3,574
Valley Foothill Riparian	9
White Fir	21,933

¹ Habitat type classification is based on the CDFW CWHR (Mayer and Laudenslayer 1988).

² Acreage values are rounded to the nearest whole number.

Sensitive Natural Communities

Sensitive natural communities 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 (i.e., riparian areas), the Porter-Cologne Act, and/or Sections 401 and 404 of the Clean Water Act, which includes wetlands and other waters of the U.S. and State.

Sensitive natural communities, such as wetlands and other waters of the U.S. and State, are present within El Dorado County and have potential of being within the footprint of the proposed broadband infrastructure given the numerous stream crossings present along County ROWs. Other sensitive natural communities within the County may include riparian areas oak woodland, and other terrestrial habitats deemed sensitive by CDFW and/or the County.

Wildlife Movement Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. This fragmentation of habitat can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or construction activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and, (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

Some areas along the northern and southwestern boundary of the County are mapped as Essential Connectivity Areas (ECA) by the California Essential Habitat Connectivity Project. Other wildlife movement corridors are likely present throughout the Project area, such as riparian areas, drainages, or contiguous vegetated areas; however, these potential corridors will need to be evaluated on a site-specific level to determine the presence or absence within the project footprint.

4.4.2 Methodology

Biological studies conducted in support of this program EIR consisted of a special-status species evaluation, which included a desktop review and database searches to identify known biological resources in El Dorado County and vicinity with potential to occur within the Project footprint of the proposed broadband infrastructure.

For the purposes of this program EIR, special-status species are defined as those that fall into one or more of the following categories, including those:

- Listed as endangered or threatened under FESA, including candidates and species proposed for listing;
- Listed as endangered or threatened under CESA, including candidates and species proposed for listing;
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code;

- Designated a SSC by CDFW;
- Considered by CDFW to be a Watch List species with potential to become a SSC;
- Defined as rare or endangered under Section 15380 of CEQA; or,
- Having a CNPS designated CRPR of 1A, 1B, 2A, or 2B.

To evaluate special-status species and/or their habitats with the potential to occur in El Dorado County and/or be impacted by the proposed Project, HELIX obtained lists of regionally occurring special-status species from the following information sources:

- California Department of Fish and Wildlife. 2024. California Natural Diversity Database; For: El Dorado County. Accessed October 15, 2024;
- California Native Plant Society (CNPS). 2024. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39) For: El Dorado County. Accessed October 15, 2024;
- U.S. Fish and Wildlife Service (USFWS). 2024a. Information for Planning and Consultation (IPaC) List of threatened and endangered species that may occur in El Dorado County. Accessed October 15, 2024; and,
- National Marine Fisheries Service (NMFS). 2024. Essential Fish Habitat Mapper. Accessed October 15, 2024.

Appendix C includes these lists of special-status plant and animal species occurring in the Project region, along with the potential for these regionally occurring special-status species to occur in the County. HELIX also reviewed the following sources for published information pertinent to biological resources within El Dorado County:

- Mayer, K.E. and W.F. Laudenslayer. 1988. A Guide to Wildlife Habitats of California. State of California, Resources Agency, Department of Fish and Game, Sacramento, CA 166pp.
- USFWS. 2024b. National Wetland Inventory online wetland mapper. Accessed October 15.
- U.S. Department of Agriculture (USDA), Forest Service (USFS). 2014. Existing Vegetation (Eveg) – Classification and Assessment with LANDSAT of Visible Ecological Groupings (CALVEG) Region 5, Zones 4 (South Sierra) and 5 (Central Valley).
- USDA, Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey. Available online at: <http://websoilsurvey.sc.egov.usda.gov>. Accessed October 15.

4.4.3 Significance Thresholds

The thresholds for determining significance under CEQA are based on Appendix G of the CEQA Guidelines. In this analysis, the proposed Project would have significant impacts on biological resources if it would:

1. 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 CDFW or USFWS.
2. Have a substantial adverse effect of any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. 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.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.4.4 Impact Analysis

BIO-1 The proposed project may result in a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

With the programmatic nature of this EIR, a precise, project-level analysis of the specific effects of individual fiber projects on special-status species is not possible at this time; the analysis is maintained at the County level. As individual fiber projects would be primarily located within previously disturbed and/or developed areas (e.g., in ROW or public utility easement), it is unlikely that the proposed Project would result in a substantial adverse effect on special-status species or their associated habitats, including USFWS designated critical habitats and/or NMFS essential fish habitat. However, individual fiber projects would be required to prepare a biological resources assessment (BRA) that would assess impacts to special-status species on the individual fiber project site, as outlined in Mitigation Measure BIO-1. With implementation of the recommended mitigation and/or avoidance measures included in the project-specific BRA to be prepared as required by Mitigation Measure BIO-1 below, impacts to special-status species would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure BIO-1: Prepare a Site-Specific Biological Resources Assessment

Prior to approval of an individual fiber project, the applicant of an individual fiber project shall retain a qualified biologist to prepare a site-specific biological resources assessment (BRA). The BRA shall consist of a desktop review of relevant biological databases and online resources, a general biological reconnaissance survey, vegetation mapping, aquatic resources assessment, analysis of potential impacts to biological resources, and proposed measures to avoid and/or reduce potential impacts.

If it is determined during the biological resources assessment that special-status species have the potential to occur within a project area, then site-specific mitigation measures should be recommended to avoid and/or reduce potential impacts. Potential measures for special-status species may include, but are not limited to, protocol-level surveys, nesting bird surveys, and other focused preconstruction surveys.

If it is determined that special-status species are present within or adjacent to the project area, or if the project has potential to impact USFWS designated critical habitat and/or NMFS essential fish habitat, then the project proponent shall coordinate with CDFW and/or USFWS, as necessary, to determine avoidance and/or mitigation and/or measures to reduce potential impacts to a level that would be less than significant. Depending on site-specific conditions, agency involvement may be triggered through the regulatory permitting process or direct agency consultation.

Significance with Mitigation: Less than significant impact.

BIO-2 The proposed project may result in a substantial adverse effect on a sensitive natural community.

Sensitive natural communities may include, but are not limited to, aquatic resources under federal and/or State jurisdiction, riparian habitats, and oak woodlands. It is anticipated that individual fiber projects would be primarily located within previously disturbed and/or developed areas (e.g., in ROW or public utility easement), and it is unlikely that the proposed Project would result in a substantial adverse effect on sensitive natural communities. However, if sensitive natural communities would be impacted by Project implementation, then the impact would be potentially significant. With the implementation of Mitigation Measure BIO-2, potential impacts to jurisdictional waters, wetlands, and/or sensitive natural communities that may occur within the Project area would be reduced to less than significant. With the implementation of Mitigation Measure BIO-3, potential impacts to oak resources that may occur within the Project area would be reduced to less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure BIO-2: Jurisdictional Delineation and Regulatory Permitting

If it is determined that impacts to jurisdictional waters or other sensitive natural communities cannot be avoided, then the project applicant of an individual fiber project shall apply for any necessary permits from the USACE, CDFW, and the RWQCB (e.g., Section 401/404 permits, CDFW Lake or Streambed Alteration Agreement, etc.). If necessary, a formal delineation of wetlands and “other waters” of the U.S. shall be prepared in accordance with USACE’s *Corps of Engineers Wetlands Delineation Manual* and appropriate regional supplements to determine the extent of aquatic resources and quantify impacts. Impacts to jurisdictional waters and/or sensitive natural habitat shall be mitigated in accordance with agency requirements.

Mitigation Measure BIO-3: Oak Resources Inventory

If it is determined during the biological resources assessment that an individual fiber project will result in impacts to oak resources, depending on the location of an individual fiber project, the County, incorporated cities, or TRPA may require mitigation for impacts to oak resources or regulated individual oak trees. Depending on the location of the individual fiber project, the County Community Planning and Building Department, City of Placerville Planning Division, City of South Lake Tahoe Planning Division,

and/or TRPA may require an inventory of prematurely removed trees or canopy cover to determine the extent of the loss prior to approval of the individual fiber project. The inventory shall be prepared by a resource professional with expertise in oak woodlands ecology who is on the list of qualified consultants maintained by the County Community Planning and Building Department, City of Placerville Planning Division, City of South Lake Tahoe Planning Division, or TRPA. Resource professionals may include botanists, ecologists, wildlife biologists, and foresters.

Significance with Mitigation: Less than significant impact.

BIO-3 The proposed project may result in a substantial adverse effect on State or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) or other waters of the U.S. or State through direct removal, filling, hydrological interruption, or other means.

Potential impacts to State or federally protected wetlands or other waters of the U.S. or State are currently unknown given the programmatic nature of this EIR. As individual fiber projects would be primarily located within previously disturbed and/or developed areas (e.g., in ROW or public utility easement), it is unlikely that the proposed Project would result in a substantial adverse effect on State or federally protected aquatic resources. However, potential impacts to State or federally protected aquatic resources would be addressed by avoidance and/or mitigation measures stipulated by regulatory permits as required by Mitigation Measure BIO-2. With implementation of Mitigation Measure BIO-2, the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

See Impact BIO-2 for Mitigation Measure BIO-2.

Significance with Mitigation: Less than significant impact.

BIO-4 The proposed project may interfere with the movement of native resident wildlife species or with established native resident or migratory wildlife corridors.

Some areas along the northern and southwestern boundary of the County are mapped as ECAs by the California Essential Habitat Connectivity Project. However, El Dorado County is a rural county that currently provides extensive open, dispersal habitat for wildlife movement in the Project area. The proposed Project would install fiber optic conduit underground, aboveground on overhead pole lines, or a combination of both. Implementation of the Project is unlikely to substantially interfere with the movement of wildlife or interfere with the functionality of wildlife corridors; however, potential impacts to the movement of native resident wildlife species or wildlife corridors would be addressed in the project-specific BRA to be prepared as required by Mitigation Measure BIO-1. With implementation of Mitigation Measure BIO-1, the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

See Impact BIO-1 for Mitigation Measure BIO-1.

Significance without Mitigation: Less than significant impact.

BIO-5 The proposed project may conflict with local policies or ordinances protecting biological resources.

As discussed in Impact BIO-2, if it is determined during the biological resources assessment that a project would result in impacts to oak resources, then the County may require mitigation for impacts to oak resources or regulated individual oak trees. While some individual oak trees could be damaged by projected development under the Project, the scope of premature removals cannot be anticipated based on the programmatic level of analysis of this program EIR. As noted in Mitigation Measure BIO-3 above, individual fiber projects that would result in impacts to oak resources may be required to conduct an oak tree inventory to determine if mitigation is needed. The proposed project would not conflict with any other local policies or ordinances protecting biological resources. With the implementation of Mitigation Measure BIO-1 and Mitigation Measure BIO-3, the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

See Impact BIO-1 for Mitigation Measure BIO-1 and Impact BIO-2 for Mitigation Measure BIO-3.

Significance without Mitigation: Less than significant impact.

BIO-6 The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

No Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other local, regional, or State habitat conservation plan has been adopted or approved in El Dorado County. Therefore, the Project would not conflict with any provisions of an adopted HCP. No impact would occur.

Significance without Mitigation: No impact.

4.4.5 Cumulative Impacts**BIO-7 The proposed project may result in a significant cumulative impact with respect to biological resources.**

Cumulative impacts would occur when the proposed Project, in combination with other projects and plans/projects in El Dorado County, would directly or indirectly result in an adverse impact(s) to a special-status species, on a sensitive natural community, to jurisdictional aquatic resources, wildlife movement corridors and nursery sites, or conflict with local policies/ordinances protecting biological resources or an HCP/NCCP. Although impacts to biological resources are site specific, project specific impacts contribute to a continued loss of biological resources throughout the range of the species or other biological resource being impacted. The cumulative context for biological resources is based on projects located within El Dorado County that would impact vegetation communities and species similar to those impacted by the proposed Project, as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The cumulative impacts analysis is based on a combination of the list and regional growth projections incorporated into the County's General Plan.

The proposed broadband infrastructure is anticipated to be within previously disturbed and/or developed areas (e.g., in ROW or public utility easements). However, given that the exact alignment of the future broadband infrastructure is currently unknown, there is the potential that some of the locations for future program components may support sensitive biological resources. In general, a project's potential impacts related to sensitive biological resources depend on the specific project site and whether it supports sensitive natural communities, special-status species, and/or aquatic resources. As discussed above, the proposed program would have potential impacts to special-status species, sensitive natural communities, or State or federally protected aquatic resources and/or conflict with local policies which would be reduced to less than significant levels by the implementation of Mitigation Measures BIO-1 through BIO-3.

Numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. The projects listed as part of this cumulative analysis would also be subject to CEQA review and would be required to comply with any mitigation measures identified as necessary to reduce potential impacts to biological resources. Therefore, the proposed Project is not expected to make a cumulatively considerable contribution to losses of sensitive biological resources in El Dorado County.

Significance without Mitigation: Potentially significant impact.

See Impact BIO-1 for Mitigation Measure BIO-1 and see Impact BIO-2 for Mitigation Measure BIO-2 and Mitigation Measure BIO-3. These mitigation measures address potentially significant impacts identified in Impacts BIO-1 through BIO-5.

Significance with Mitigation: Less than significant impact.

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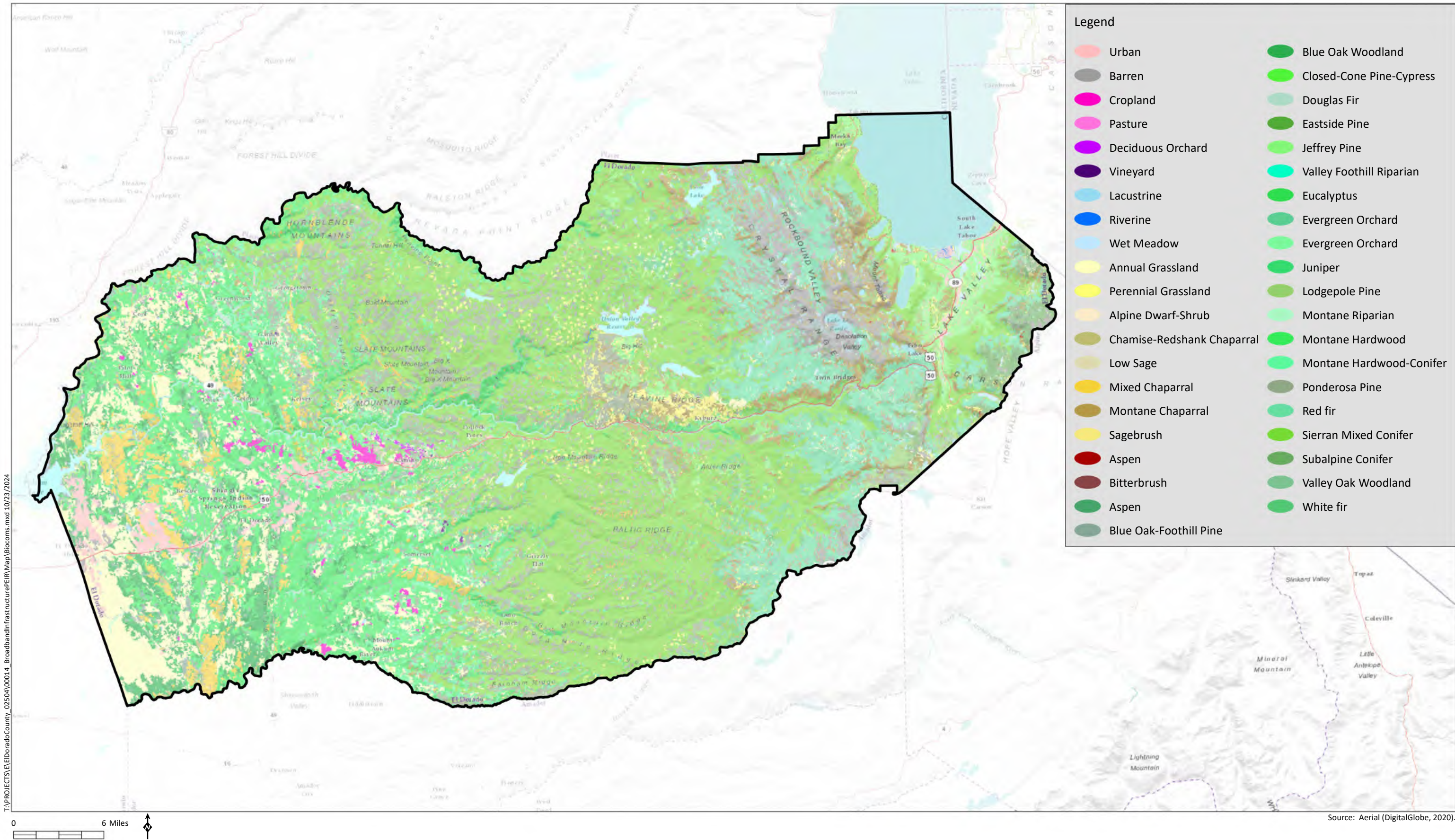
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4.5 CULTURAL RESOURCES

This section describes the regulatory framework and existing conditions related to cultural resources and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on cultural resources were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to cultural resources.

4.5.1 Environmental Setting

4.5.1.1 Cultural Resources Overview

Cultural resources encompass archaeological, Native American, traditional, and built environment resources, including but not necessarily limited to buildings, structures, objects, districts, and sites. Cultural resources can be categorized into pre- and post-contact resources. Precontact-era resources represent the remains of human occupation associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historic-era, or post-contact, resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region.

Potential impacts to tribal cultural resources in El Dorado County (County) are discussed and evaluated in Section 4.18, *Tribal Cultural Resources*.

4.5.1.2 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for cultural resources. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

National Historic Preservation Act (54 United States Code 300101 et seq.)

The National Historic Preservation Act (NHPA) establishes the federal government policy on historic preservation and the programs, including the National Register of Historic Places (NRHP), through which this policy is implemented. Under the NHPA, significant cultural resources, referred to as historic properties, include any prehistoric or historic district, site, building, structure, object, or landscape included in, or determined eligible for inclusion in, the NRHP. Historic properties also include resources determined to be a National Historic Landmark. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting United States heritage. A property is considered historically significant if it meets one or more of the NRHP criteria and retains sufficient historic integrity to convey its significance. This act also established the Advisory Council on Historic Preservation (ACHP), an independent agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policies. The ACHP also provides guidance on implementing Section 106 of the NHPA by developing procedures to protect cultural resources included in, or eligible for inclusion in, the NRHP. Regulations are published in 36 Code of Federal Regulations (CFR) Parts 60, 63, 800.

Section 106 of the NHPA (codified as 36 CFR Part 800) requires that effects on historic properties be taken into consideration in any federal undertaking. The process generally has five steps: (1) initiating Section 106 of the NHPA process, (2) identifying historic properties, (3) assessing adverse effects, (4) resolving adverse effects, and (5) implementing stipulations in an agreement document.

Section 106 of the NHPA affords the ACHP and the State Historic Preservation Officer (SHPO), as well as other consulting parties, a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. State Historic Preservation Officers administer the national historic preservation program at the state level, review NRHP nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with federal agencies during Section 106 review.

The NRHP eligibility criteria (36 CFR Section 60.4) is used to evaluate significance of potential historic properties. Properties meeting any of the following criteria are considered eligible for listing in the NRHP if they retain integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

- a. Associated with events that have made a significant contribution to the broad patterns of our history.
- b. Associated with the lives of persons significant to our past.
- c. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master; or that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction.
- d. Have yielded, or may be likely to yield, information important in prehistory or history.

Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for NRHP inclusion. In addition, a broader range of Traditional Cultural Properties are also considered and may be determined eligible for or listed in the NRHP. Traditional Cultural Properties are places associated with the cultural practices or beliefs of a living community that are rooted in that community's history and that may be eligible because of their association with cultural practices or beliefs of living communities that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. In the NRHP programs, "culture" is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the nation as a whole.

California State Office of Historic Preservation

The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the SHPO, a gubernatorial appointee, and the State Historical Resources Commission.

OHP's responsibilities include:

- Identifying, evaluating, and registering historic properties;
- Ensuring compliance with federal and state regulatory obligations;
- Encouraging the adoption of economic incentives programs designed to benefit property owners; and
- Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.

State Regulations

California Environmental Quality Act of 1970

CEQA Guidelines establishes a process for the issuing of discretionary permits by all California public agencies. The process includes full public disclosure and analysis of a project's potential effects on the human environment, open public comment period(s), and written responses by agencies to public comments. CEQA also requires agencies to consider project alternatives that reduce environmental impacts, and to ensure that environmental impacts are fully mitigated if mitigation is practicable. The human environment considered under CEQA includes agriculture, air quality, biological resources, geology and soils, greenhouse gases, hazards, historical and archaeological resources, land use and planning policies, mineral resources, noise, paleontological resources, population growth and housing, public services, recreation, traffic, tribal cultural resources, water quality, utilities, and visual resources.

Historical and archaeological resources are afforded consideration and protection by CEQA [14 California Code of Regulations (CCR) Section 21083.2, 14 CCR Section 15064]. The CEQA Guidelines define significant cultural resources under two regulatory designations: historical resources and unique archaeological resources. An historical resource is defined as a "resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register for Historic Resources (CRHR)"; or "a resource listed in a local register of historical resources or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the [PRC]"; or "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the agency's determination is supported by substantial evidence in light of the whole record" (14 CCR Section 15064.5[a][3]). Historical resources that are automatically listed in the California Register of Historic Resources (CRHR) include California historical resources listed in or formally determined eligible for the NRHP and California Registered Historical Landmarks from No. 770 onward (PRC 5024.1[d]). Locally listed resources are entitled to a presumption of significance unless a preponderance of evidence in the record indicates otherwise.

Under CEQA, a resource is generally considered historically significant if it meets the criteria for listing in the CRHR. A resource must meet at least one of the following four criteria (PRC 5024.1; 14 CCR Section 15064.5[a][3]):

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. Title 14, CCR Section 4852(b)(1) adds "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.”

- Is associated with the lives of persons important in our past. Title 14, CCR Section 4852(b)(2) adds, “is associated with the lives of persons important to local, California, or national history.”
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values. Title 14, CCR 4852(b)(3) allows a resource to be CRHR eligible if it represents the work of a master.
- Has yielded, or may be likely to yield, information important in prehistory or history. Title 14, CCR 4852(b)(4) specifies that importance in prehistory or history can be defined at the scale of “the local area, California, or the nation.”

Historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association (14 CCR 4852[c]).

An archaeological artifact, object, or site can meet CEQA’s definition of a unique archaeological resource, even if it does not qualify as a historical resource (14 CCR 15064.5[c][3]). An archaeological artifact, object, or site is considered a unique archaeological resource if “it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC 21083.2[g]):

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.”

Within California state law, cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. All resources nominated for listing in the CRHR must have integrity; the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Therefore, resources must retain enough of their historical character or appearance to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and/or association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination (Calif. PRC § 5024.1).

CEQA Guidelines, California Code of Regulations Title 14, Section 15064.5

When an initial study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC. A project proponent may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans identified as the most likely descendant by the NAHC.

Assembly Bill 52

Assembly Bill (AB) 52 adds consultation with Native American tribes to the approval process for all projects requiring discretionary permits and subject to CEQA (see below). Tribes inform local agencies that they wish to be informed of proposed actions, and agencies are required to consult with those tribes before taking actions that may affect tribal cultural resources.

California Senate Bill 18 (California Government Code, Section 65352.3)

Pursuant to Senate Bill 18, local governments are required to consult with California Native American tribes identified by the NAHC for the purpose of protecting and/or mitigating impacts to cultural places. Senate Bill 18 requires formal consultation with Native American tribes as part of a project that enacts or amends a general plan or a specific plan.

California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

Public Resources Code Section 5024 et seq.

PRC Section 5024 requires that each state agency develop policies for the preservation and maintenance of all state-owned historical resources under its jurisdiction listed in, or potentially eligible for, inclusion in the NRHP, or registered or eligible for registration as a state historical landmark. Each State agency is required to submit updates to their inventory of all state-owned structures over 50 years of age under its jurisdiction listed in or which may be eligible for inclusion in the NRHP or registered or which may be eligible for registration as a state historical landmark. These inventories are used to create a master list maintained by the OHP. The SHPO must be consulted by state agencies if any action would alter or affect any resources on this master list (PRC Section 5024(f)). Additionally, Section 5024.1 establishes the CRHR as an authoritative guide for identifying which cultural resources are to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR eligibility criteria provide one of the bases for determining a cultural resource to be significant under CEQA.

Public Resources Code Section 5097.9 et seq.

PRC Section 5097.9 establishes that both public agencies and private entities using, occupying, or operating on state property under public permit, shall not interfere with the free expression or exercise of Native American religion and shall not cause severe or irreparable damage to Native American sacred sites, except under special, determined circumstances of public interest and necessity. This section also creates the Governor-appointed nine-member NAHC, charged with identifying and cataloging places of special religious or social significance to Native Americans, identifying and cataloging known graves and cemeteries on private lands, and performing other duties regarding the preservation and accessibility of sacred sites and burials and the disposition of Native American human remains and burial items.

Under PRC Section 5097.5, all state and local agencies must cooperate with the NAHC by providing copies of appropriate sections of all CEQA environmental impact reports relating to property of special significance to Native Americans. The NAHC is required to investigate the effect of proposed actions by a public agency if these actions may either cause severe or irreparable damage to a Native American sacred site located on state property or inhibit access to that site.

The NAHC is authorized to recommend mitigation measures if it finds, after a public hearing, that a proposed action would result in that damage or interference and to request action from the Attorney General if these mitigation measures are not addressed. This section also includes requirements for landowners to limit further development activity on property where Native American human remains are found until that landowner confers with NAHC-identified most likely descendants to consider treatment options. It further enables those descendants, within 48 hours of notification by the NAHC, to inspect the discovery site and recommend to the landowner or the person responsible for the excavation the means to treat or dispose of the human remains and any associated grave goods with dignity. In the absence of a most likely descendant, or of a treatment acceptable to all parties, the landowner is required to reinter the remains elsewhere on the property in a location that will not be disturbed. Finally, this section makes it a felony to remove Native American artifacts or human remains from a Native American grave or cairn, as well as to acquire, possess, sell, or dissect Native American remains, funerary objects, or artifacts from a Native American grave or cairn and establishes the repatriation of these remains, funerary objects, and associated grave artifacts as state policy (PRC Section 5097.9, *et seq.*).

California Health and Safety Code Section 8010-8011: California Native American Graves Protection and Repatriation Act (2001)

This section establishes a state policy that is partially consistent with the federal Native American Graves Protection and Repatriation Act (NAGPRA). It attempts to ensure that all Native American human remains, and cultural items are treated with dignity and respect. It encourages the voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California and requires that the State provide tribes with the mechanisms necessary to file and follow up with repatriation claims (California Health and Safety Code Section 8010 8011, *et seq.*).

California Government Code Sections 65560 and 65562.5: Consultation with Native Americans on Open Space (2005)

This section identifies the protection of Native American cultural places as acceptable designations of open space. It further requires local governments to conduct meaningful consultation with California Native American tribes on the contact lists maintained by the NAHC for purposes of protecting cultural places located on open space (California Government Code Section 65560, 65562.5, *et seq.*).

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal

government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 33, *Grading and Construction*, applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction. Section 33.3.7 stipulates that whenever historic, prehistoric, or paleontological materials appearing to be 50 years or older are discovered during grading activity and have not been accounted for previously pursuant to Section 67.3, below, grading shall cease, and TRPA shall be notified immediately. TRPA shall suspend grading and consult with the appropriate local, State, or federal entities and determine whether the site should be nominated as a historical resource.

Chapter 67, *Historic Resource Protection*, provides for the identification, recognition, protection, and preservation of the Region's significant cultural, historic, archaeological, and paleontological resources. Section 67.3, Resource Protection, establishes measures for the inadvertent discovery and protection of historic or cultural artifacts during construction and ground disturbing activities.

The Shorezone Subelement, Conservation Element of the Goals and Policies identifies special qualities, including physical, biological and visual, that shall be considered when reviewing a project in the shorezone or lakezone. In accordance with those policies, Chapter 80, *Review of Projects in the Shorezone and Lakezone*, sets forth findings that must be made by TRPA prior to approving a project in the shorezone or lakezone. All projects and activities in lagoons or the shorezone or lakezone of any lake in the Region shall comply with the provisions of this chapter. Section 80.4.6 establishes measures to protect historical and/or cultural resources in the shorezone and lakezone in the Region.

TRPA Regional Plan

Cultural resources are addressed within the Cultural sub-element of the *Conservation Element* of the TRPA Regional Plan (TRPA 2024b). The Cultural sub-element contains the following goal and policy that applies to the Project:

- **Goal C-1:** Identify and preserve sites of historical, cultural, and architectural significance within the Region. The Tahoe Region has a heritage that should be recognized and appropriately protected. Due to the harsh weather conditions, changing development standards, and changing uses of the Region, many structures that had significant historical or architectural value have been destroyed or lost.
 - **Policy C-1.1:** Historical or culturally significant landmarks in the Region shall be identified and protected from indiscriminate damage or alteration. TRPA will confer with local, state and federal agencies to maintain a list of significant historical, architectural, and archaeological sites within the Region that have been identified by applicable agencies. Special review criteria will be established to protect such designated sites in cooperation with property owners.

Local Regulations

El Dorado County General Plan

Cultural resources are addressed within the *Conservation and Open Space Element* of the County General Plan. The *Conservation and Open Space Element* contains the following goal, objectives, policies, and implementation measure that apply to the Project (County 2017):

- **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 7.5.1.3:** 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 7.5.1.6:** 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 7.5.2.4:** The County shall prohibit the modification of all National Register of Historic Places/California Register of Historical Resources 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.
- **Implementation Measure CO-Q:** Develop and adopt a Cultural Resources Preservation Ordinance.

City of Placerville General Plan

Cultural resources are addressed within *Section V – Natural, Cultural, and Scenic Resources* of the City of Placerville General Plan (City of Placerville 2004). The *Natural, Cultural, and Scenic Resources* section contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal G:** To preserve and enhance the City of Placerville’s historical heritage.
 - **Policy 1:** The City of Placerville shall set as a high priority the protection and enhancement of Placerville’s historically and architecturally significant buildings and sites.
 - **Policy 3:** The City of Placerville shall prepare, maintain, and regularly update an inventory of buildings, sites, cemeteries, parks, and other artifacts of historical and architectural significance.
 - **Policy 5:** The City of Placerville shall work with property owners in seeking registration of historical structures as State Historic Landmarks and/or listing on the National Register of Historic Places.
 - **Policy 6:** The City of Placerville shall support the efforts of property owners to preserve and renovate historic and architecturally significant structures. Where buildings cannot be preserved intact, the City shall seek to preserve the building facades.
 - **Policy 10:** The City of Placerville shall work closely in promoting and protecting Placerville’s historic heritage with historical and heritage organizations, including those along the Highway 49 “Gold Chain.”
- **Goal H:** To protect Placerville’s Native American heritage.
 - **Policy 1:** The City of Placerville shall not knowingly approve any public or private project that may adversely affect an archeological site without consulting the California Archeological Inventory at California State University, Sacramento, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendations of a qualified archeologist. City implementation of this policy shall be guided by Appendix K of the State CEQA Guidelines.
 - **Policy 2:** The City of Placerville shall refer development proposals that may adversely affect archeological sites to the California Archeological Inventory at California State University, Sacramento.

- **Policy 3:** The City of Placerville shall work closely in promoting and protecting Placerville’s Native American heritage with historical and archeological organizations, including those along Highway 49 “Gold Chain.”
- **Implementation Program 8:** The City of Placerville shall conduct a survey of historic and architecturally significant buildings, structures, and sites in the immediate Placerville area. The resulting inventory shall be regularly updated.
- **Implementation Program 10:** The City of Placerville shall establish an agreement with the California Archeological Inventory at California State University, Sacramento, for review of development proposals that may adversely impact archeological sites.

City of South Lake Tahoe General Plan

Cultural resources are addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goal, policies, and implementation program that apply to the Project:

- **Goal NCR-4:** To preserve and maintain sites and structures that serve as significant, visible connections to the City of South Lake Tahoe’s social, cultural, and architectural history.
 - **Policy NCR-4.1: Significant Site Preservation.** The City of South Lake Tahoe shall preserve sites of historical, cultural and architectural significance within the City, consistent with the Secretary of the Interior Standards for Treatment of Historic Properties.
 - **Policy NCR-4.2: Historic Landmark Designation.** The City of South Lake Tahoe shall designate structures or sites having special character or special historic, architectural, or aesthetic interest or value as local historic landmarks. The City shall protect local historic landmarks from demolition and inappropriate alterations and develop criteria for evaluating the appropriateness for sites or structures to be designated as local historic landmarks and provide incentives for preservation of local historic landmarks.
 - **Policy NCR-4.3: Archeological Investigations.** The City of South Lake Tahoe shall require archeological investigations for all applicable discretionary projects, in accordance with CEQA regulations, for areas not previously surveyed and/or that are determined sensitive for cultural resources (e.g., undeveloped parcels near water features). The City of South Lake Tahoe shall require the preservation of discovered archeologically-significant resources (as determined based on TRPA, State, and Federal standards by a qualified professional) in place if feasible, or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures) prior to further disturbance.
 - **Policy NCR-4.4: Paleontological Resource Evaluation.** The City of South Lake Tahoe shall require that a paleontological resources evaluation be prepared and measures to mitigate impacts to paleontological resources be identified (avoidance, preservation in place, excavation, documentation, and/or data recovery) when fossils are discovered during ground-disturbing activities.

- **Policy NCR-4.5: Human Remain Discovery.** The City of South Lake Tahoe shall require/condition projects and other ground disturbance activities to notify the City if human remains are discovered and halt work. The County Coroner will be notified according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.
- **Implementation Program IMP-8.5: Historic Landmark Designation.** The City of South Lake Tahoe shall create a historic landmark program to designate structures or sites having special character or special historic, architectural, or aesthetic interest or value as local historic landmarks. The program should protect local historic landmarks from demolition and inappropriate alterations, including criteria for evaluating the appropriateness for sites or structures to be designated as local historic landmarks, and incentives for preservation of local historic landmarks.

4.5.1.3 Cultural Setting

Prehistoric Background

As is the case for archaeological research in many areas of the State, the various classification schemes and chronologies used by researchers when addressing the precontact era of north-central California and the Sierra foothills often conflict with one another. Most recently, Rosenthal (2011) has framed an overview of past research in the area by incorporating data from radiocarbon and obsidian hydration dates, projectile point types, and shell and glass bead types to delineate five temporal periods that account for the span of human occupation in the area (Table 4.5-1). The following summary of local cultural history is based on this revised chronological framework.

**Table 4.5-1
TEMPORAL PERIODS AND CHRONOLOGICAL SEQUENCE**

Temporal Period	Chronological Sequence	Date Range
Late Pleistocene	Paleo-Indian Period	~13,500 to 11,500 BP
Early Holocene	Early Archaic Period	11,500 to 7000 BP
Middle Holocene	Middle Archaic Period	7000 to 3000 BP
Late Holocene	Late Archaic Period	3000 to 1100 BP
Late Holocene	Recent Prehistoric I and II	1100 to 100 BP

Paleo-Indian Period (~13,500 to 10,500 Years Before Present [BP])

There is little evidence of Late Pleistocene occupation in the immediate region, although the southern portion of the Central Valley shows evidence in the form of isolated, basally thinned and fluted projectile points found on the surface of remnant Pleistocene landscape features. With few exceptions these points have been found as isolates in undatable surface contexts, and therefore have been associated with the Paleo-Indian period solely on the basis of their morphological similarity to securely dated Clovis projectile points from the Great Plains and Southwest regions (Dillon 2002:115). Potential Paleo-Indian finds from the general vicinity of the proposed Project include a fluted point found in the lower component of the Skyrocket Site (CA-CAL-629/630), located west of New Melones Reservoir. The point was found in context with other artifacts that are typically associated with both the Paleo-Indian

and Early Archaic periods, leading Bieling et al. (1996) to suggest that the component represents the transition between mobile big-game hunters and a more sedentary population that had a greater reliance on plant resources. Most local archaeological deposits associated with the late Pleistocene, if they exist, were likely destroyed or buried by a significant period of alluvial deposition that began about 9050 cal BP (Rosenthal et al. 2007).

Early Archaic Period (10,500 to 7000 BP)

The Early Archaic Period in the region has been mainly represented by isolated finds, including heavy stemmed dart or spear points that are often found in association with groundstone tools. Flaked stone artifacts were generally manufactured from local toolstone, although imported obsidian was also used. The few sites with relatively diverse and abundant Early Archaic assemblages include the Skyrocket Site and the Clarks Flat site (CA-CAL-342), located on the Stanislaus River near Salt Springs Reservoir at the edge of the Central Valley. Early Archaic deposits have also appeared south of the proposed Project area at CA-TUO-4557, partially in the form of flake tools and percussion debitage in buried late Pleistocene soils. The period was marked by high residential mobility, although the density of groundstone and expedient cobble-core tools at some sites suggest that they represent frequently visited camps in a settlement system structured around repetitive seasonal movement (Rosenthal et al. 2007). In contrast to the common interpretation that large game hunting was the focus of Early Archaic economies, this seasonal round appears to have targeted grassland-savanna resources, particularly acorns and wild cucumbers. Seeds and nuts were processed with millingslabs and handstones. Obsidian from Lower Archaic period sites has been sourced to both the North Coast Ranges and Eastern Sierra sources, suggesting that regional interaction spheres were well established by this time (Rosenthal et al. 2007).

Middle Archaic Period (7000 to 3000 BP)

The beginning of the Middle Holocene saw a substantial shift to warmer, drier conditions, and subsistence increasingly emphasized upland plant resources. In contrast to earlier occupations, deposits dating to the Middle Archaic are relatively common throughout the region, although they also tend to be buried beneath more recent alluvial deposits. Assemblages are generally varied, diverse, and increasingly specialized, and are characterized by high numbers of expedient cobble tools, handstones, and millingslabs, although mortars and pestles appeared as early as 4050 cal B.C. Projectile points associated with the Middle Archaic period include notched, stemmed, thick-leaf, and narrow concave base dart forms manufactured from locally available cryptocrystalline silicate (CCS), metavolcanic greenstones, and igneous materials including obsidian from the North Coast Ranges and, more often, the Eastern Sierra (Rosenthal et al. 2007; Rosenthal 2011). A few shell ornaments and beads recovered from burials suggest that social stratification began to develop during this period.

The latter half of the Middle Archaic represented “the end of generalized, and often highly mobile, Early Holocene lifeways and the beginning of more specialized and intensive California hunter-gatherer-fishers known from ethnographic times” (Stevens et al. 2009:1). Middle Archaic populations inhabited substantial residential sites below snowline during the winter when underground granaries were used to store fall-ripening nut crops of acorns and gray pines and moved to higher elevations in the spring to take advantage of spring- and summer-ripening seeds, berries, and fruits. This decrease in residential mobility and increase of base camp-type settlements implies a shift from a “forager” strategy, where populations are highly mobile and make frequent residential moves to opportunistically exploit a series of localized resource patches, to a logistically organized “collector” strategy where logistically organized food procurement parties travel from a central base camp to harvest and process specific resources

(Binford 1980). The specialized tool assemblages, nonutilitarian objects, trade goods, and types of plant and animal remains that appear during the Middle Archaic period point to the longer-term residential settlements associated with collector strategies (Rosenthal et al. 2007).

Late Archaic Period (3000 to 1100 BP)

The climate of the prehistoric late Holocene approximated that of today, with cooler and moist conditions than the middle Holocene but drier than the early Holocene.

The Upper Archaic period was essentially a continuation of late Middle Archaic lifeways and settlement patterns, including decreased residential mobility and the establishment of fixed, permanent or semi-permanent villages. Bedrock milling stations appear in the archaeological record by at least 1,300 BP, although at the Central Valley margins and Sierra foothills handstones and millingslabs were commonly used to process acorns and pine nuts (Rosenthal et al. 2007). Bone tools, wands, tubes, and ornaments are common in sites dating to this period, as are manufactured goods such as saucer- and saddle-shaped *Olivella* beads and *Haliotis* ornaments. The uniformity of these manufactured goods suggests some level of standardized or mass production, and implies an increased reliance on exchange relationships (Rosenthal et al. 2007). The prevalence of Bodie Hills obsidian in assemblages dated to this period underscores the importance of trade with Eastern Sierra groups.

Recent Prehistoric I and II (1100 to 100 BP)

The stable climate that began during the Upper Archaic continued through the Recent Prehistoric I (1,100 to 610 BP) and II (610 to 100 BP) periods. The most significant technological advancement during this period was the adoption of the bow and arrow, which replaced the atlatl and dart between about A.D. 1000 and 1300. Territorial boundaries became well established, and increased social complexity is suggested by a wider variation in burial types and furnishings. Cremation, which was reserved for high-status individuals during the beginning of the period, eventually became widespread in the Central Valley and adjacent foothills (Rosenthal et al. 2007). Human bones, often in great numbers, have also been found in limestone caverns throughout the foothill region (Moratto 1984).

The use of the acorn came to prevail over gray pine as a major dietary component, and significant increases in thin-shelled pine nuts are also apparent. These subsistence changes, coupled with an increase in sedentism marked by numerous year-round residential hamlets, indicate resource intensification that likely made necessary because of increased population, although seasonal migration that spanned foothill woodlands and montane forests to 6,000 feet in elevation continued. The Recent Prehistoric II period is also represented by an expanded artifact assemblage that included bone awls, drills, and other tool-making tools; evidence of basketry in specialized sites; incised tablets, bone whistles, shell and glass beads; and other specialized or non-utilitarian artifacts.

Ethnographic Background

At the time of contact, three main groups of Native Americans inhabited El Dorado County. The Nisenan (or “Southern Maidu”) occupied the northern portion of the County in an area stretching from Folsom Reservoir to the crest of the Sierra Nevada just west of Lake Tahoe, and up to several miles south of present-day U.S. Highway 50 (U.S. 50). Sierra Miwok peoples lived in a region generally south of U.S. 50, extending from the Latrobe area in the west to the vicinity of Strawberry in the east. The higher elevation areas to the west and south of Lake Tahoe were occupied by the Washoe.

Nisenan

At the time of European contact, much of the Project vicinity was occupied by the Nisenan (alternatively known as the Southern Maidu). Maidu groups are identified primarily by their language, which is a subgroup of the California Penutian linguistic family; these groups are divided, mainly on dialectic grounds, into the Nisenan, or Southern Maidu (living within the American River drainage plus parts of the Bear, Cosumnes, and Yuba rivers), the Northeastern Maidu (on the upper reaches of the North and Middle Forks of Feather River), and the Northwestern Maidu (below the foothills of the Sierra Nevada where the south, middle, north, and west branches of Feather River converge and on upper Butte and Chico creeks as well as parts of the Sacramento Valley). Nisenan villages ranged in population from 15 to 25 people, with the tribal centers averaging more than 500 people. Large settlements consisted of one major village with associated smaller, seasonal camps. Villages were typically located on ridges above major streams and rivers and were inhabited mainly in the winter months. During the hot summer months, the Nisenan moved to cooler temporary camps in higher elevations.

The local environment provided abundant food sources with seasonal gathering conducted mainly by women and children. Hunting and fishing, primarily conducted by the men, were year-round pursuits but were most successful in the late summer and early fall. The Nisenan had few contacts outside their immediate tribal territory and those contacts were limited to warfare, trade, and ceremonial gatherings. Villages were led by a headman or advisor, but each extended family had a leader who assisted the village headman. Some of the headman's duties included advising the people in general, preventing them from trespassing, directing ceremonies and festivities, arbitrating disputes, and leading the village in times of warfare. Typically, the dead were cremated along with their property, and their dwelling was either moved or destroyed.

Maidu groups practiced a religion called the "Kuksu," which was widespread among California Native Americans and appeared in various forms. Ceremonies were typically conducted in the semi-subterranean dance houses that were centrally located within each village. A ceremony celebrated annually in the fall was the mourning ceremony that honored ancient ancestors as well as the individuals that had died during the year.

Early contact with the Spanish was limited to the southern edge of Nisenan territory, with most early accounts resulting from early penetrations of Spanish into Plains Miwok territory. During the late 18th century, systematic removal to the missions and resistance by the Plains Miwok occurred along the border shared with the Nisenan. The Nisenan also received missionized Native Americans into their territory, as well as Miwok villagers displaced by the Spanish (Wilson and Towne 1978:387–97).

In 1833, a massive epidemic, believed to have been malaria, swept through the Sacramento Valley (Cook 1955). The exact number of casualties is unknown, but it is estimated that 75 percent of the Maidu population were killed, leaving only a fraction of the original number to face the intruding miners and settlers that arrived when gold was discovered in Coloma in 1848.

Sierra Miwok

The southern portion of El Dorado County is located within what was recorded ethnographically as territory of the Sierra Miwok (Kroeber 1925). The Miwokan family of languages, a member of the Utian sub-stock, was made up of seven distinct languages variously situated in central California from Clear Lake south to the Bay Area and east to encompass the foothills and mountains of the central Sierra Nevada. Sierra Miwok was initially a single language, which developed into the Northern, Central, and

Southern Miwok languages over time (Levy 1978). The central group occupied the foothills and mountains of the Stanislaus and Tuolumne river drainages. The name "Miwok", from Central Sierra Miwok *miwū* (person), was a construct of ethnographers and had little meaning to Miwok speakers, in that they did not consider themselves a single group. They were, instead, separate, independent tribelets which together shared common language and culture.

The Sierra Miwok economy was focused on the acquisition of seasonally available foods through logistically organized seasonal migration which appears to be a continuation of the settlement and subsistence strategy developed during the Late Archaic and Recent Prehistoric periods. During winter populations concentrated in villages below snowline, and from spring to fall small groups dispersed to higher elevations to exploit ripening plant foods and available. Acorns, the Sierra Miwok's primary plant food, were stored for winter consumption in above-ground granaries and processed with nutting anvils, hammer stones, pestles, and portable and bedrock mortars. Gray and sugar pines were also important food sources, as were others that produced seeds and edible roots. Deer were the most important game animal to the Sierra Miwok, but bear, rabbits, and a wide variety of small game were taken as well.

Washoe

The Washoe people inhabited the high-altitude portions of the County west and south of Lake Tahoe. The Washoe language is arguably associated with the Hokan language family, and as such is distinct from both the Penutian languages to the west (i.e., Maidu and Miwok) and the Uto-Aztecan languages to the east (i.e., Paiute) (Jacobsen 1986). D'Azevedo (1986) argues that these distinctions suggest the Washoe occupation of the high Sierra predates the arrival of Numic speakers in the western Great Basin and may have begun as early as 6000 years ago.

By inhabiting different ecological zones from much of the Nisenan and Miwok areas, the Washoe adopted somewhat different economic, subsistence, settlement, and technological systems. For example, while the Nisenan and Miwok relied heavily on the acorn as a staple food, the Washoe exploited a wide variety of flora including camas bulbs, bitterroot, tule, cattail, wild rye, and pine nuts. Bedrock mortars are also found in Washoe areas, but they tend to be shallower and far less numerous than at lower elevations of the County, reflecting less use of food resources requiring extensive processing (El Dorado County 2003).

The types of resources associated with ethnographic or early historic-era periods of Native American occupation in the County differ little from those noted for later prehistoric periods. Sites and activity areas were still located in well-watered level areas and bedrock mortars were used for food processing until fairly recent times. Ethnographic village sites frequently exhibit large subterranean structure remains or house pits and can be more readily visible than the remnants of earlier Native American cultures and periods.

Historical Background

The most drastic and permanent change to the Native Americans' way of life came 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 (Kroeber 1925). 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 in the vicinity of the missions, and a pastoral economy involving the missions, the ranchos, and native inhabitants was established (Kyle et al. 1990).

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. Shoup and Milliken (1999) state that 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 in order to become Mexican citizens who were eligible to receive land grants. In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of Alta California was 8,000 non-natives and 10,000 natives. However, these estimates have been debated - Cook (1976) suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reported the Native American population as 20,385.

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. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the entire state. By late 1848, approximately four out of five men in California were gold miners.

The gold rush originated along the reaches of the American River and other tributaries to the Sacramento River. Placerville, originally called Dry Diggings and informally referred to as Hangtown, became one of the closest towns offering mining supplies and other necessities for the miners in Coloma and the surrounding areas. Subsequent gold was found in the tributaries to the San Joaquin, which flowed north to join the Sacramento River in the great delta east of San Francisco Bay. The Mokelumne River formed the boundary between two areas, the upper gold fields known as the Northern Mines and those below the Mokelumne known as the Southern Mines. Other strikes occurred in the northwest regions of California around the Trinity, Klamath and Salmon rivers.

As mining spread, mining techniques changed. Initially, miners relied on gold panning in a shallow pan until the heavier, gold-bearing materials fell to the bottom while the water and lighter sand spilled out over the rim. This technique was displaced by simple mining machines like the wooden "rocker" into which pails of water were emptied and processed at one time. The gold in and around stream beds was soon exhausted, and hard-rock mining took over, digging shafts up to 40 feet deep with horizontal tunnels radiating from these shafts in search of subterranean veins of gold-bearing quartz.

Hydraulic mining was used on local hillsides with gold-bearing gravel left from now-vanished streambeds. Streams and rivers were diverted from their original courses to provide water for primitive high-pressure hoses that washed down the gravel from a hillside. However, in a short time, the bed of the Sacramento River was raised several feet by tons of debris coming down from the hills, drinking water was polluted, and the danger of flooding was imminent; in 1884 the Sacramento courts banned hydraulic mining, thus saving the city.

By 1864, California's gold rush had essentially ended. The rich surface and river placers were largely exhausted, and the miners either returned to their homelands or stayed to start new lives in California. 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 (Beck and Haase 1974). 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.

With the increasing popularity of Lake Tahoe as a recreation destination in the late 19th century, and the formation of the Eldorado National Forest in 1910, the Mormon Emigrant Trail, the Carson Emigrant Trail, the Pony Express Trail and other lesser-known routes evolved into more developed roadways. State Route (SR) 88 and U.S. 50 roughly follow some of these trails. Former Pony Express stations such as the Sportsman's Hall in Pollock Pines still exist today and small settlements such as Kyburz and Strawberry sprang up to serve travelers to the National Forest and the Lake Tahoe Basin. Some of the buildings in these towns, and the roadways and associated structures still visible, represent some of the more prominent transportation-related cultural resources in the County (El Dorado County 2003).

4.5.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact associated with cultural resources if the Project would:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
3. Cause a substantial adverse change in the significance of archaeological cultural resources that are accidentally discovered during project construction; or,
4. Disturb any human remains, including those interred outside of formal cemeteries.

4.5.3 Impact Analysis

For the purposes of this program-level analysis, four potential impact scenarios are presented. The first addresses built-environment cultural resources that meet the CEQA definition of historical resources; the second involves archaeological cultural resources that qualify as historical or unique archaeological resources under CEQA; the third comprises the accidental discovery of archaeological cultural resources during construction; and the fourth involves discovery of human remains during construction. Each impact scenario is addressed below.

CUL-1 The proposed project would not cause a substantial adverse change in the significance of a built-environment cultural resource that qualifies as a historical resource pursuant to Section 15064.5.

The proposed Project could require the aerial installation of fiber optic line on utility poles in instances where constraints prevent the installation of subsurface conduit. The aerial installation of such fiber optic lines would entail the use of existing or newly constructed utility poles within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and connect to utility poles located within public or private utility easements. Such installations may introduce new visual elements to areas with concentrations of historic-era built environment cultural resources such as buildings and structures that comprise historic districts. Historic districts derive much of their significance from their ability to visually convey a sense of time and place from their architecture, street furniture, and streetscape corridor appearance.

The use of existing or newly constructed utility poles for the collocation of fiber optic cable would change the visual signature of the poles and their vicinity. However, these collocations and new installations would be relatively minor additions to existing utility corridors in the County already populated with other utility infrastructure, including in and near historic districts and historical resources. The installation of these fiber optic lines, as proposed, would not diminish a built-environment resource's ability to convey its significance or justify the reasons for its qualification as a historical resource, two of the criteria of material impairment in the definition of a substantial adverse change in the significance of a historical resource. The impact would be less than significant.

Significance without Mitigation: Less than significant impact.

CUL-2 The proposed project may cause a substantial adverse change in the significance of an archaeological cultural resource that qualifies as a historical resource or unique archaeological resource pursuant to Section 15064.5.

CEQA applies to archaeological sites, and during an impact assessment, archaeological sites are first considered as potential historical resources (CEQA Guidelines Section 15064.5 (c)(1)). El Dorado County has a rich archaeological record with expressions of material culture in almost every environmental setting. Examples of these archaeological cultural resources can range from precontact-era settlement and resource procurement areas to mining-related features such as adits and tailings, or archaeological features sealed beneath the hardscape of the County's urbanized areas. Their significance can lie in their ability to contain information important in the precontact era and/or the historic era, but also in their value to descendant communities as expressions of their cultural heritage and patrimony.

Because archaeological cultural resources are non-renewable, project-related disturbance can impede or destroy their ability to convey their significance, which can embody scientific and/or traditional cultural value. Should that occur, a significant effect on the environment could result.

Implementation of Mitigation Measure CUL-1 contains measures that would identify potential archaeological resource impact scenarios, would seek to avoid impacts to such resources if feasible, and would mitigate those impacts that cannot be avoided through Project design. Avoidance is the preferred method of mitigation under CEQA (CEQA Guidelines Section 15370), and ideally archaeological resources that have been determined to be significant should be preserved in place to prevent the loss of their

scientific and/or heritage values. When avoidance is not feasible, the loss of scientifically and culturally consequential data would be offset by an archaeological mitigation program of excavation, analysis, and documentation of information. With implementation of Mitigation Measure CUL-1, the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure CUL-1: Archaeological Cultural Resources Investigations

Preconstruction Screening Identification

Prior to each phase of individual fiber projects, including installation and/or use of appurtenant structures, unpaved staging areas, and fiber optic line, El Dorado County shall request a records search for all project footprints for construction activities that require ground disturbance in areas that have not been previously subject to such disturbance. For those areas of native, unpaved soil that have not been adequately surveyed for archaeological cultural resources in the past, the County shall require a pedestrian field survey by a qualified professional archaeologist. If archaeological cultural resources are identified as a result of that survey, the County shall implement the recommendations of the consulting archaeologist to avoid or substantially reduce the severity of impacts on such resources. For those areas that have been surveyed previously, the County shall abide by the recommendations of the professional archaeologist who conducted the original survey.

Known Resource Conflicts

In the event that the records search described above identifies archaeological cultural resources that would be subject to a project-related impact, the County shall evaluate the status of the resource under CEQA. The archaeological resource shall be assessed for significance through the implementation of a Phase II investigation by a qualified archaeologist. This may require some or all of the following:

- Development of a research design that guides assessments of site significance and scientific potential.
- Mapping and systematic collection of a representative sample of surface artifacts.
- Subsurface investigation through shovel test pits, surface scrapes, or 1-by-1 meter excavation units; a combination of such methods; or equivalent methods.
- Analysis of recovered material to determine significance pursuant to the CEQA Guidelines.
- Preparation of a report, including an evaluation of site significance, and recommendations for mitigation, if appropriate.
- Appropriate curation of collected artifacts.

If the resource is precontact in nature, the Phase II investigation shall be coordinated with descendant tribal communities. If the Phase II evaluation concludes that the archaeological resource does not qualify as a historical resource (PRC Section 21084.1) or unique archaeological resource (PRC Section 21083.2), then no further study or protection of the resource is necessary. If the resource does qualify

as a historical or unique archaeological resource, then the County shall require the implementation of the Phase III approach described below.

A Phase III data recovery effort, in accordance with CEQA Guidelines, shall be implemented by the consulting archaeologist for those sites that are shown by the Phase II efforts to qualify as significant under CEQA. The County shall ensure that data recovery conducted to the level that reduces impacts to below the level of significance has been completed prior to individual fiber project implementation. The Phase III data recovery program shall include all or a combination of the following methods:

- Development of a research design to identify important research questions that may be answered through a systematic study of the resource.
- Mapping and systematic collection of surface artifacts, possibly complete data recovered depending on site size.
- Subsurface investigation through methods such as controlled hand-excavation units, machine excavations, deep testing, or a combination of methods. When applicable, other techniques, such as geophysical testing, may be warranted.
- Analysis of recovered material through visual inspection and chemical analysis when applicable.
- Preparation of a report.
- Appropriate curation of collected artifacts.

If the resource is precontact in nature, the Phase III investigation shall be coordinated with descendant tribal communities.

Significance with Mitigation: Less than significant impact.

CUL-3 The proposed project may cause a substantial adverse change in the significance of archaeological cultural resources that are accidentally discovered during project construction.

Archaeological cultural resources encountered during individual fiber project construction may qualify as significant under CEQA for their ability to contain historically important information, or for their value to descendant communities as expressions of their cultural heritage and patrimony. Because archaeological cultural resources are non-renewable, their disturbance by Project implementation can impede or destroy their ability to convey their significance, which can be embodied as scientific and/or traditional cultural value. Should that occur, a significant effect on the environment could result.

Mitigation Measure CUL-2 contains measures that would identify potential archaeological cultural resource impact scenarios, seek to avoid impacts to such resources if feasible, and mitigate those impacts that cannot be avoided through individual fiber project redesign. Avoidance would prevent the loss of scientific and/or heritage values of the resource, and archaeological mitigation would offset the loss of scientifically consequential data through a program of excavation, analysis, and documentation of information would otherwise be lost. With implementation of Mitigation Measure CUL-2, the impact would be less than significant.

Mitigation Measure CUL-2: Inadvertent Discovery of Archaeological Cultural Resources

In the event that cultural resources are exposed during ground-disturbing activities, construction activities shall be halted within 100 feet of the discovery. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts, or features, including hearths, structural remains, or historic-era dumpsites. If the resources cannot be avoided during the remainder of construction, a consulting archaeologist who meets the Secretary of the Interior's *Professional Qualifications Standards* for archaeology shall assess the resource and provide appropriate management recommendations. The County shall implement those recommendations to avoid or substantially reduce the severity of impacts on significant resources.

Significance with Mitigation: Less than significant impact.

CUL-4 The proposed project would not disturb human remains, including those interred outside of formal cemeteries

There is the potential to encounter human remains in almost any environmental context that occurs in El Dorado County. Therefore, implementation of the proposed Project has the potential to expose human remains during ground-disturbing activities. Should that occur, a significant effect on the environment could result.

The County is required to comply with CEQA Guidelines Section 15064.5, California Health and Safety Code Section 7050.5, and California Public Resources Code §5097.9 *et seq.* to avoid or substantially reduce the severity of impacts on human remains. As outlined in these regulations, the severity of impacts would be reduced by minimizing additional ground disturbance in the vicinity of the remains, and by development and implementation of a plan for respectful treatment of the remains in consultation with descendant communities who place religious and cultural significance in such remains. Further mitigation measures are unnecessary because compliance with the regulations listed above would avoid or substantially reduce the severity of impacts on human remains. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

4.5.4 Cumulative Impacts**CUL-5 The proposed project may result in cumulative impacts on cultural resources.**

Cumulative cultural resource impacts may occur when a series of actions lead to the loss of historically or archaeologically significant type of site, building, deposit, or tribal cultural resource. For example, while the loss of a single historic building may not be significant to the character of a neighborhood or streetscape, continued loss of such historical resources on a project-by-project basis could amount to a significant cumulative effect. As discussed above under Impact CUL-1 through CUL-4, implementation of the proposed Project would result in a less than significant impact on cultural resources with implementation of Mitigation Measure CUL-1 and Mitigation Measure CUL-2.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system

management and operations, and bike and pedestrian infrastructure improvement projects. As such, each cumulative project that would be subject to CEQA would be required to assess its potential impact on cultural resources. Mitigation measures conducted for each cumulative individual fiber project would ensure that impacts on cultural resources are minimized to the maximum extent feasible. Therefore, with implementation of Mitigation Measures CUL-1 and Mitigation Measure CUL-2, and the requirement for the other cumulative projects subject to CEQA to adopt similar measures, no cumulatively considerable impact on cultural resources would occur with approval of the proposed Project.

Significance without Mitigation: Potentially significant impact.

See Impact CUL-2 for Mitigation Measure CUL-1 and Impact CUL-3 for Mitigation Measure CUL-2.

Significance with Mitigation: Less than significant impact.

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4.6 ENERGY

This section describes the regulatory framework and existing conditions related to energy and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on energy were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to energy.

4.6.1 Environmental Setting

4.6.1.1 Regulatory Framework

This section describes federal, State, and local environmental laws and policies that are relevant to the CEQA review process for energy. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was originally enacted in 1975 with the intention of ensuring that all vehicles sold in the U.S. meet established fuel economy standards. Following congressional establishment of the original set of fuel economy standards the U.S. Department of Transportation (DOT) was tasked with establishing additional on-road vehicle standards and making revisions to standards, as necessary. Compliance with established standards is based on manufacturer fleet average fuel economy, which originally applied to both passenger cars and light trucks but did not apply to heavy-duty vehicles exceeding 8,500 pounds in gross vehicle weight. The fuel economy program implemented under the Energy Policy and Conservation Act is known as the Corporate Average Fuel Economy (CAFE) Standards. Updates to the CAFE standards since original implementation have increased fuel economy requirements and began regulation of medium- and heavy-duty vehicles.

Energy Policy Act of 2005

The Energy Policy Act of 2005 addressed energy production in the U.S. from various sources. In particular, the Energy Policy Act of 2005 included tax credits, loans, and grants for the implementation of energy systems that would reduce GHG emissions related to energy production.

State Regulations

Renewable Energy Programs and Mandates (SB 1078, SB 107, SB 2 X1, SB 350 and SB 100)

A series of substantive and far-reaching legislative initiatives have advanced at the State level in the last two decades. These initiatives focused on increasing the generation of electricity via renewable energy sources and promoting a shift from fossil- or carbon-based fuels as a key strategy to reduce GHG emissions, air pollution, and water use associated with the energy sector.

In 2002, California established the Renewables Portfolio Standard (RPS) with Senate Bill (SB) 1078, requiring electric utilities in the State to increase procurement of eligible renewable energy resources to achieve a target of 20 percent of their annual retail sales by the year 2010. In 2011, Governor Jerry

Brown approved the California Renewable Energy Resources Act, SB 2 X1. SB 2 X1 legislatively broadens the scope of the State RPS to include retail electricity sellers; investor- and publicly owned utilities; municipal utilities; and community choice aggregators under the mandate to obtain 33 percent of their retail electrical energy sales from renewable sources by 2020.

Approved by Governor Brown on October 7, 2015, SB 350 increases California’s renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of RPS eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

Approved by Governor Brown on September 10, 2018, SB 100 extends the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sale of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and/or zero-carbon resources by the end of 2045.

California Energy Plan

The California Energy Commission (CEC) is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. To further this policy, the plan identifies a number of strategies, including providing assistance to public agencies and fleet operators.

Executive Order S-1-07

Executive Order S-1-07 was adopted in 2009 and requires transportation fuels such as gasoline and diesel sold within the state to be less carbon intensive. These policies reduce emissions from on-road transportation and off-road equipment use in El Dorado County (County).

Local Regulations

City of South Lake Tahoe Climate Action Plan

The City of South Lake Tahoe adopted the City’s first Climate Action Plan (CAP) in 2020 for the purpose of reducing emissions by 2030 and 2040, which aligns with legislatively adopted state targets and goes even further to meet the local targets outlined in Resolution 2017-26, Establishing Renewable Energy and Carbon Emissions Reduction Goals. The City of South Lake Tahoe has set local targets based upon the trajectory necessary to meet and exceed the Statewide goals (City of South Lake Tahoe 2020). The CAP was prepared to serve as a long-term plan to reduce GHG emissions from community activities, as well as prepare for the impact of Climate Change. However, the CAP was not developed to meet CEQA Guidelines Sections Section 15183.5, and no thresholds of significance were developed.

City of South Lake Tahoe General Plan

Energy is addressed within the *Natural and Cultural Resources Element* and the *Public Services/Quasi-Public Facilities and Services Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011).

The *Natural and Cultural Resources Element* contains the following goal and policies that apply to the Project:

- **Goal NCR-6:** To encourage energy conservation in new and existing developments in order to reduce greenhouse gas emissions, limit their effect on global warming, and to create a more sustainable environment.
 - **Policy NCR-6.3: Local, Clean, and Renewable Energy Support.** The City of South Lake Tahoe shall increase energy efficiency, reduce emissions and support local, clean, and renewable energy sources.
 - **Policy NCR-6.4: Increasing Economic Efficiency and Performance.** The City of South Lake Tahoe shall increase economic efficiency and performance by reducing the consumption of nonrenewable resources.
 - **Policy NCR-6.5: Creating Environmental Impact Action Tools.** The City of South Lake Tahoe shall identify action items for residents and businesses that improve energy efficiency and reduce environmental impact.

The *Public Services/Quasi-Public Facilities and Services Element* contains the following goal and policies that apply to the Project:

- **Goal PQP-8:** To promote provision of adequate levels of utility services by private companies and to ensure that these are constructed in a fashion that minimizes their negative effects on surrounding development and maximizes energy efficiency.
 - **Policy PQP-8.3: Promote Technology.** The City of South Lake Tahoe shall promote technological improvements and upgrading of utility services in South Lake Tahoe.
 - **Policy PQP-8.4: Coordination with Utility Providers.** The City of South Lake Tahoe shall coordinate with gas and electricity service providers to site and design gas and electric systems to minimize environmental, aesthetic, and safety impacts to existing and future residents.
 - **Policy PQP-8.5: Digital Communications Infrastructure.** The City of South Lake Tahoe shall facilitate installation of digital communications infrastructure.

4.6.1.2 Existing Conditions

Local Energy Supply

Electricity

Electricity on the western slope of El Dorado County is supplied by Pacific Gas and Electric Company (PG&E). PG&E owns and operates electricity infrastructure in the County and throughout Northern California that includes power lines, powerhouses, and substations. PG&E produces some of its own power and purchases some of its electricity through the Independent System Operator, which obtains electricity from a number of companies that operate power plants throughout the Western Grid (County 2003).

NV Energy (formerly Sierra Pacific Power) provides electrical service to the City of South Lake Tahoe and the City's sphere of influence (SOI). NV Energy provides electrical services through regulated public utility contracts. The utility company is bound by contract to update its systems to meet any additional demands. NV Energy's service territory covers approximately 50,000 square miles in western, central, and northeastern Nevada and northeastern California including the Lake Tahoe area. In 2006, NV Energy served 45,901 residential and commercial customers in California. A total of 9,393,464 megawatt hours (Mwh) were supplied in 2006, with a peak load of 1,701 megawatts (MW). NV Energy has 12,636 circuit miles of electric transmission lines and 34,678 miles of aboveground and underground electric distribution lines. In California, NV Energy operates two distribution substations, one in Meyers and one in Stateline. Distribution lines have a primary voltage of 14,400 volts (City of South Lake Tahoe 2010).

The Sacramento Municipal Utility District (SMUD) also owns and maintains power lines in El Dorado County; however, it does not provide electricity services to users in the County.

Natural Gas

PG&E supplies natural gas on the west slope of El Dorado County. Natural gas distribution lines only extend from the Sacramento County line to the community of El Dorado Hills and El Dorado Hills Business Park. The households in the remaining portions of the west slope of the County use either all electric energy or use propane in place of natural gas (County 2003).

Southwest Gas Corporation (Southwest) provides natural gas services to the City of South Lake Tahoe and the City's SOI. Southwest provides natural gas services through federal- and state-regulated public utility rules and tariffs. The utility company is bound by these rules and tariffs to update its systems to meet any additional residential customer demands. Southwest provides natural gas distribution and procurement. Services are provided within three counties of its northern California certificated service areas with a total service area of approximately 90 square miles. Southwest's service area in northern California includes the Truckee, Donner Lake, North Lake Tahoe, and South Lake Tahoe areas. Southwest provides services utilizing approximately 1,230 miles of natural gas distribution pipelines and serves approximately 38,000 natural gas distribution customers (City of South Lake Tahoe 2010).

Propane

Propane, also known as liquefied petroleum gas, is used as an additional energy source to electric energy in areas of the County without access to natural gas distribution lines. From the refinery or processing plant, propane is shipped to an intermediate terminal; from there it is shipped to the local propane supplier for delivery to commercial and residential end users. All propane is transported under pressure in its more compact liquid form. Typically, propane is transported by trucks or pipelines. Propane used in the County is transported to privately owned and operated local propane suppliers, which store propane in "bulk plants" on their premises. In El Dorado County bulk plants typically have 18,000–30,000 gallons of storage capacity (County 2003).

4.6.2 Significance Thresholds

According to Appendix G of the State CEQA Guidelines, the following criteria may be considered in establishing the significance of energy consumption:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation;

2. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

The CEQA Guidelines Appendix F, Energy Conservation, provides guidance for Environmental Impact Reports (EIRs) regarding potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing the inefficient, wasteful and unnecessary consumption of energy. In addition, though not described as thresholds for determining the significance of impacts, Appendix F seeks inclusion of information in an EIR addressing the following topics:

- The project's energy requirements and its energy-use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

4.6.3 Impact Analysis

EN-1 Implementation of the project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

The Project would not generate additional energy demand beyond existing conditions within the Project area, but rather seeks to improve the connectivity of rural communities in El Dorado County through improved broadband access.

Construction

The proposed Project would allow for individual fiber projects to install fiber optic conduits either underground in buried conduits, overhead on utility pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, the incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public rights-of-way (ROW). Broadband infrastructure could also be constructed on private disturbed land and federal land and could connect to existing conduit or utility poles located within public or private utility easements.

Construction of individual fiber projects may require the use of heavy-duty construction equipment. Energy would be consumed in the form of gasoline and diesel fuel to power this equipment and would be consumed in worker commute vehicles. However, this energy use would be inherently short-term

and temporary. Therefore, construction of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and the impact would be less than significant.

Operation

Operation of the individual fiber projects under the Project would not result in a population increase and would not generate new vehicle trips beyond occasional maintenance activities. An emergency backup generator may be used at some of the individual fiber sites in the event of a power outage or for routine testing. Monthly routine testing is assumed to last 15 minutes at one time.

Additionally, implementation of the proposed Project would expand El Dorado County's broadband network, which could ultimately result in a decrease in gasoline consumption as rural workers are provided with better telecommuting opportunities, resulting in a reduction in vehicles miles traveled (VMT) Countywide. Therefore, operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

EN-2 Implementation of the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Energy is addressed within the City of South Lake Tahoe General Plan and in the City of South Lake Tahoe CAP. See discussion under Impact EN-1, above. As the proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy efficiency. The Project would conform to all applicable State, federal, and local laws, and codes. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

4.6.4 Cumulative Impact

EN-3 The proposed project would not contribute to a significant cumulative impact due to energy resources.

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would result in the wasteful or inefficient use of energy. Individual fiber projects under the proposed Project could be constructed concurrently with, and in proximity to, other transportation projects in El Dorado County. The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches. Numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be minimal because they would not typically involve substantial ongoing energy use during operation.

As discussed under Impacts EN-1 and EN-2, construction and operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, nor conflict with or obstruct a State or local plan for renewable energy efficiency. In consideration of cumulative energy use, the proposed Project would not contribute to a substantial demand for energy resources or services such that new regional energy facilities would be required to be constructed as a result of the incremental increase in energy demand resulting from the proposed project. Therefore, the proposed Project would have a less than cumulatively considerable impact related to energy.

Significance without Mitigation: Less than significant impact.

4.6.5 References

El Dorado County (County). 2003. General Plan Draft Environmental Impact Report. May. Available at: <https://www.eldoradocounty.ca.gov/Land-Use/Planning-Services/Adopted-General-Plan/General-Plan-Supporting-Documents/Draft-Environmental-Impact-Report-DEIR>.

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4.7 GEOLOGY AND SOILS

This section describes the regulatory framework and existing conditions related to geology and soils and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on geology and soils were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to geology and soils.

4.7.1 Environmental Setting

4.7.1.1 Regulatory Framework

This section describes State, regional, and local environmental laws and policies that are relevant to the CEQA review process for geology and soils. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions. There are no federal laws or policies that are relevant to geology and soils.

Specific guidelines encompassing geologic criteria that may be applicable to the design and construction of the proposed Project include: (1) International Building Code (IBC; International Building Code Council, Inc. 2006); and the related California Building Code (CBC; CCR Title 24, Part 2); (2) The California Seismic Hazards Mapping Act (Public Resources Code [PRC] Division 2, Chapter 7.8, Section 2690 et seq.); (3) The Alquist-Priolo Earthquake Fault Zoning Act (PRC Division 2, Chapter 7.5, Section 2621 et seq.); and (4) applicable standards of the Tahoe Regional Planning Agency (TRPA), El Dorado County (County) and incorporated cities of Placerville and South Lake Tahoe.

State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Act (PRC Section 2621 et seq.) is intended to reduce risks to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults capable of surface rupture or fault creep (earthquake fault zones). Generally, the required setback is 50 feet from an active fault trace. The act also defines criteria for identifying active faults and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

The Alquist-Priolo Act establishes "earthquake fault zones" and strictly regulates construction along or across zones that are sufficiently active and well defined. A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for the purposes of the act as referring to approximately the last 11,700 years). A fault is considered well-defined if its trace can be identified clearly by a trained geologist at the ground surface, or in the shallow subsurface using standard professional techniques, criteria, and judgment (CGS 2018).

Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690-2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including

strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act – the State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards; and cities and counties are required to regulate development within mapped seismic hazard zones.

Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans. Geotechnical investigations conducted within seismic hazard zones must incorporate standards specified by California Geological Survey Special Publication 117a, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008).

California Building Standards Code

The California Building Standards Code (CBSC) (24 California Code of Regulations) provides the minimum standards for structural design and construction. The CBSC is based on the previously discussed IBC, which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for California conditions with numerous, more detailed, or more stringent regulations. The CBSC requires that “classification of the soil at each building site will be determined when required by the building official” and that “the classification will be based on observation and any necessary test of the materials disclosed by borings or excavations”. In addition, the CBSC states that “the soil classification and design-bearing capacity will be shown on the (building) plans, unless the foundation conforms to specified requirements.” The CBSC provides standards for various aspects of construction including, but not limited to, excavation, grading, and earthwork construction; fills and embankments; expansive soils; foundation investigations; and liquefaction potential and soil strength loss. In accordance with California law, certain aspects of the project would be required to comply with all provisions of the CBSC.

The CBSC requires extensive geotechnical analysis and engineering for grading, foundations, retaining walls, and other structures, including criteria for seismic design.

California Public Resources Code

Several PRC sections protect paleontological resources. Section 5097.5 prohibits “knowing and willful” excavation, removal, destruction, injury, and defacement of any paleontological feature on public lands (lands under State, county, city, district, or public authority jurisdiction, or the jurisdiction of a public corporation), except where the agency with jurisdiction has granted express permission. Section 30244 requires reasonable mitigation for impacts on paleontological resources that result from development on public lands.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe’s importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional

Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the TRPA, a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 33, *Grading and Construction*, applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction.

Chapter 35, *Natural Hazard Standards*, sets forth regulations pertaining to recognition of natural hazards, prevention of damage to property, and protection of public health relating to such natural hazards. It implements provisions of the Goals and Policies and the Water Quality Management Plan for the Lake Tahoe Region pertaining to avalanche and mass instability, floodplains, and wildfire.

TRPA Regional Plan

Geology and soils are addressed within the Soils sub-element of the *Conservation Element* of the TRPA Regional Plan (TRPA 2024b). The Soils sub-element contains the following goal and policy that apply to the Project:

- **Goal S-1: Minimize Soil Erosion and the Loss of Soil Productivity.** Protection of the Region's soil is important for maintaining soil productivity and vegetative cover and preventing excessive sediment and nutrient transport to the streams and lakes. Soil protection is especially critical in the Region where the soils are characteristically shallow and highly susceptible to erosion. Strategies for soil conservation are consistent with thresholds established for soil, water, and vegetation.
 - **Policy S-1.6:** Maintain seasonal limitations on ground disturbing activities during the wet season (October 15 to May 1) and identify limited exceptions for activities that are necessary to preserve public health and safety or for erosion control. Impacts related to soil disturbance are highly exaggerated when the soil is wet. For precautionary reasons, all project sites must be adequately winterized by October 15 as a condition for continued work on the site. Exceptions to the grading prohibitions will be permitted in emergency situations where the grading is necessary for reasons of public safety or for erosion control.

Local Regulations

El Dorado County Code

Chapter 110.14, *Grading, Erosion, and Sediment Control*, regulates grading within the unincorporated areas of El Dorado County in order to protect life, limb, health, property and public welfare; avoid pollution of watercourses; and ensure that the intended use of a graded site is consistent with the General Plan and any specific adopted plans, including the Western El Dorado County Storm Water Management Plan, State Fire Safe Standards, and relevant El Dorado County ordinances. The ordinance establishes the procedures for the issuance of grading permits, approval of plans, and inspection of

construction sites. The ordinance also requires that waterways and adjacent properties be protected from erosion, flooding, or sediment deposits that could result from grading activities.

El Dorado County General Plan

Geology and soils are addressed within the *Conservation and Open Space Element* of the County General Plan. The *Conservation and Open Space Element* contains the following goal, objectives, policies, and implementation measure that apply to the Project (County 2017):

- **Goal 7.1: Soil Conservation.** Conserve and protect the County's soil resources.
 - **Objective 7.1.1: Soils.** Long-term soil productivity.
 - **Policy 7.1.1.1:** Conserve and maintain important agricultural soils for existing and potential agricultural and forest uses by limiting non-agricultural/non-forestry development on those soils.
 - **Objective 7.1.2: Erosion/Sedimentation.** Minimize soil erosion and sedimentation.
 - **Policy 7.1.2.1:** Development or disturbance of slopes over 30 percent shall be restricted. Standards for implementation of this policy, including but not limited to exceptions for access, reasonable use of the parcel, and agricultural uses shall be incorporated into the Zoning Ordinance.
 - **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.
- **Implementation Measure CO-A:** Review the Zoning Ordinance (Title 17 of the El Dorado County Code) to identify revisions that accomplish the following:
 - E. Develop standards for minimizing erosion and sedimentation associated with earthwork and grading. [Policy 7.1.2.2]

City of Placerville City Code

Chapter 8.7, *Grading Ordinance*, sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of plans and inspection of grading construction and all grading specific to single parcel site improvements, except single-family residence construction unless exceeding prescriptive standards as defined in the City's design and improvement standards manual.

Where the grading or earthwork involves multiple parcels, parcel maps, subdivisions, land divisions, or roads the design and improvement standards manual shall be used for design purposes.

City of Placerville General Plan

Geology and Soils are addressed within *Section V – Natural, Cultural, and Scenic Resources* and *Section VI – Health and Safety* of the City of Placerville General Plan (City of Placerville 2004).

The *Natural, Cultural, and Scenic Resources* section contains the following goal, policies, and implementation program that apply to the Project:

- **Goal B:** To prevent the premature conversion of agricultural lands and to protect the soil resources of the Placerville area.
 - **Policy 4:** The City of Placerville shall site and condition approvals of developments in areas of steep slopes and with erosive soils to minimize the need for grading and shall require reseeding and landscaping of disturbed areas, matting of steep cut slopes, and construction of retention basins.
 - **Policy 5:** The City of Placerville shall require stockpiling of topsoil and construction sites for replacement following construction.
- **Implementation Program 3:** The City of Placerville shall prepare and adopt a grading and erosion and sediment control ordinance.

The *Health and Safety* section contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal A:** To prevent loss of lives, injury and property damage due to geological hazards.
 - **Policy 2:** The City of Placerville shall require the following information and plans to be submitted for all projects subject to discretionary review by the City of Placerville in areas of moderate or high slope instability and areas with identified soil instability problems.
 - Engineering geologic report
 - Soils and foundation engineering report
 - Grading, erosion, and sediment control plan
 - Plan review letter evidencing review of all proposed development by a qualified engineering geologist
 - As-built construction report, including building plans, explanation and discussion of any deviations from the approved grading plan, the location and results of field tests, results of laboratory tests, and a statement that the work was performed under the supervision of and in accordance with recommendations of the engineering geologist and/or soils engineer
 - Signature of an engineering geologist certified by the State of California and/or a soils engineer registered in the State of California.

- **Policy 3:** The City of Placerville shall ensure that both public and private developments in areas with significant identified geological hazards are sited to minimize the exposure of structures and improvements to damage resulting from geological hazards and to minimize the aggravation of off-site geological hazards.
- **Policy 5:** The suitability of soil and/or rock formations should be one of the prime considerations for determining the type and intensity of development permitted.
- **Implementation Program 1:** The City of Placerville shall prepare, maintain, and regularly update an Index to Geological Reports which shall include reports prepared for both public and private projects.
- **Implementation Program 2:** The City of Placerville shall maintain an official Geological Map showing basic geology and the location of geological hazards. The Geological Map shall be regularly updated on the basis of geological reports prepared and filed in connection with development projects and water well logs and subsurface information developed in connection with public projects.

City of South Lake Tahoe City Code

Chapter 6.15, *Building Regulations* provides minimum requirements and standards for the protection of public safety, health, property and welfare of the City of South Lake Tahoe, and prescribes regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, moving, demolition, occupancy, equipment use, height and area of buildings and structures.

Chapter 7.20, *Grading, Erosion and Sediment Control*, of the City of South Lake Tahoe City Code is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) To avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and (3) To ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and state or federal law, this chapter shall prevail unless preempted by the state or federal law. In the event of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Geology and Soils are addressed within the *Health and Safety Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Health and Safety Element* contains the following goal and policies that apply to the Project:

- **Goal HS-3:** To protect lives and property from seismic and geologic hazards and adverse soil conditions.
 - **Policy HS-3.1: Seismically Induced Ground Shaking and Related Geologic Hazards.** The City of South Lake Tahoe shall ensure that all existing and future City buildings and

structures are of sufficient construction to withstand seismically induced ground shaking and related geologic hazards.

- **Policy HS-3.2: Retrofit Critical Facilities.** The City of South Lake Tahoe shall promote the upgrade, retrofitting, and/or relocation of all existing critical facilities (e.g., hospitals, schools, police stations, and fire stations) and other important public facilities that do not currently meet building code standards and are within areas susceptible to seismic or geologic hazards including soil liquefaction.

4.7.1.2 Existing Conditions

Geologic Setting

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 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 (County 2003).

Stratigraphy

The stratigraphy of El Dorado County encompasses a wide range of rock units that provide insight into the geologic history of the region. The County is located within the Sierra Nevada province, which is known for its complex geology, and is influenced by both ancient and ongoing geologic processes.

The Sierra Nevada batholith is a large intrusive body of granitic rock that was uplifted during the Mesozoic Era by tectonic action. The batholith consists of different types of granitic rocks including coarse-grained biotite granite, granodiorite, and tonalite, which form the core of the Sierra Nevada Mountain range. The long north to northwest rock sequences of the Sierra Nevada Foothills is composed of mostly metavolcanic and metasedimentary rocks produced from plate collision and accretion during the Mesozoic Era. Uplifting along the eastern Nevada escarpment has resulted in further broad tilting of the Sierra Nevada over the last 10 million years, continuing to fold and deform these rocks.

During the Oligocene and Paleocene Epochs, large river systems flowing west from the higher elevations of the ancient Sierra Nevada Mountain range carved valleys in which alluvial deposits were formed. These alluvial deposits and portions of the metamorphic rocks were subsequently covered by volcanic flow rocks, including lava flows, ash flows, and volcanic mud flows during the Miocene epoch.

The County's southwestern foothills are composed of rocks of the Mariposa Formation, including amphibolite, serpentine, and pyroxenite. The northwestern region of the County consists of the Calaveras Formation, which includes metamorphic rock such as chert, slate, quartzite, and mica schist. The County's higher peaks are primarily composed of igneous and metamorphic rocks with granite intrusions (County 2003).

Groundwater

El Dorado County stretches from the foothills to the higher elevations of the Sierra Nevada province, where the subsurface material consists primarily of impervious granitic and greenstone bedrock, which generally produces a low or unpredictable groundwater yield. The general hydrogeology of the County is

typical of granitic mountainous terrain, where groundwater is controlled by the weathering and structure of the bedrock. The occurrence and flow of groundwater is significantly different in fractured bedrock conditions than in unconsolidated sediments (e.g., porous sands and gravels). In this type of hydrogeologic environment, the presence of groundwater and potential well capacities are dependent not only on geographic location and geology, but also on the number and size of fractures encountered where a well is drilled, the degree of connectivity between those fractures and other fractures, and the seasonal and annual recharge of the bedrock fracture network.

For additional information on groundwater in the western slope of the County and the Lake Tahoe Basin, see Section 4.10, *Hydrology and Water Quality*, of this EIR.

Soils

Soil is the unconsolidated mixture of mineral grains and organic material that mantles the land surfaces of the earth. Soils can develop on unconsolidated sediments and weathered bedrock. The characteristics of a given soil type reflect the five major influences on its development: topography, climate, biological activity, parent source material, and time. Bedrock geology, along with agents of weathering such as erosion, soil chemistry, and human activity, all play a part in the soil type. Table 4.7-1 below summarizes the characteristics of the soil associations within the jurisdiction of the County (County 2003).

**Table 4.7-1
EL DORADO COUNTY SOIL CHARACTERISTICS**

Western El Dorado County			
Soil Association	Shrink-Swell Potential	Slope Range	
Auberry-Ahwahee-Sierra	Low/moderate	5-50%	
Auburn-Argonaut	Low/moderate/high	2-70%	
Boomer-Auburn	Low/moderate	2-70%	
Rescue	Low/moderate	2-50%	
Serpentine Rock Land-Delpiedra	Moderate	3-50%	
Cohasset-Aiken-McCarthy	Low/moderate	3-50%	
Hollan-Musick-Chaix	Low/moderate/high	5-70%	
Mariposa-Josephine-Sites	Low/moderate	3-70%	
Lake Tahoe Basin			
Soil Association	Shrink-Swell Potential	Erosion Potential	Slope Range
Loamy Alluvial Land-Elmira. Wet Variant-Celio	Low/moderate	Slight	0-5%
Elmira-Gefo	Low	Slight/moderate	0-30%
Inville-Jabu	Low/moderate	Slight/moderate	0-30%
Meeks-Tallac	Low	Slight/moderate/high	0-60%
Cagwin-Toem	Low	Moderate/high	0-60%
Rock Land-Stony Colluvial Land	N/A	Moderate	2-75%
Waca-Meiss	Low	Moderate/high	0-60%

Source: County 2003

Soils located on jurisdictional lands on the western slope of El Dorado County consist of well-drained silt and gravelly loams. The majority of soil in western El Dorado County has a low to moderate shrink-swell potential; a minimal amount has been mapped as high potential. The remaining areas are typically rock formations and are not rated (County 2003).

In the Lake Tahoe Basin, soils are organized into three major groups: (1) Nearly level to gently sloping soils along streams, on fans, and in meadows; (2) nearly level to steep soils on moraines, glacial outwash terraces, and fans; and (3) the gently sloping to very steep soils of the mountains. Generally, the shrink-swell potential in soils in this area is predominantly low.

National forest lands comprise a substantial proportion of the County's land area in the eastern region of the County. The El Dorado National Forest Soil Survey indicates that there are three soil temperature zones in the survey area (Mesic Zone, Frigid Zone, and Cryic Zone), which contain 11 map units classified at the series or higher taxonomic level. Soil units in each temperature zone are as follows (County 2003):

- Mesic Zone: Cohasset-McCarthy-Crozier, McCarthy-Ledmount, Jocal-Mariposa, ChaixPilliken-Holland, Rock Outcrop-Maymen-Lithic Xerumbrepts, and Hartless-Neuns-Mieruf.
- Frigid Zone: Waca-Windy, Ledford-Notned-Lumberly, and Tallac-Gerle-Xerumbrepts.
- Cryic Zone: Rock Outcrop-Cryumbrepts and Lithic Cryumbrepts-Andic Cryumbrepts.

Structure and Seismicity

Earthquake activity is intrinsically related to the distribution of fault systems (i.e., faults or fault zones) in a particular area. A fault is defined as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side; a fault zone is a zone of related faults that commonly are braided and subparallel but may be branching and divergent. Depending on activity patterns, faults and fault-related geologic features may be classified as active, potentially active, or inactive (County 2003). Active faults are defined as faults that have caused soil and strata displacement within the Holocene period (in the last 11,000 years). Potentially active faults are faults that show evidence of movement during Quaternary time (during the last 1.6 million years). Within the Quaternary period, faults are further classified as Late Quaternary (within the last 700,000 years, which does not necessarily exclude the Holocene period) and Early Quaternary (between 700,000 and 1.6 million years ago). Faults showing evidence of movement more than 1.6 million years ago are classified as Pre-Quaternary.

The following sub-sections provide information on faults identified within the western slope of the County and within the Lake Tahoe Basin portion of the County.

Western Slope

No active faults have been identified in the western slope of El Dorado County. One fault, part of the Rescue Lineament–Bear Mountains fault zone, is classified as a well located late-Quaternary fault; therefore, it represents the only potentially active fault in the County. It is part of the Foothills fault system, which is a complex, braided system of individual fault segments that extends for approximately 200 miles from Mariposa in the south to Lake Almanor in the north. The fault system was considered inactive until a Richter scale magnitude 5.7 earthquake involving the Cleveland Hill Fault occurred near the City of Oroville, approximately 80 miles northwest of El Dorado County, on August 1, 1975 (County 2003). The Cleveland Hill Fault does not extend into 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 (County 2003). All faults in the western slope of El

Dorado County, except for part of the Rescue Lineament-Bear Mountains fault zone, are classified as pre-Quaternary (inactive).

Lake Tahoe Basin

The Lake Tahoe Basin portion of the County is located in a region of active and potentially active faults. This conclusion can be drawn from earthquake and active fault-related topographic features and historical data, with some of the historical information dating back to the 1850s. The Tahoe Basin is a graben, or a down-dropped block bounded by steep faults on either side. These faults are structurally concordant with, although not known to be connected to, faults to the north in the vicinity of Truckee basin, Sierra Valley, Grizzley Valley, and Mohawk Valley (City of South Lake Tahoe 2010).

A substantial number of earthquakes have been recorded in these areas. In 1866, a magnitude 5.8 earthquake occurred near Hobart Mills, about 13 miles north of Lake Tahoe, yielding intensity VI in the North Shore area; in 1948, a magnitude 6.0 shock occurred about 5 miles west of Verdi, also with an intensity VI at Tahoe. Recent fault activity has been identified along the major north-south fault zone which separates the eastern edge of the Sierra Nevada from a parallel sequence of mountains, including reflection profiles of Lake Tahoe off Dollar Point. Several studies have identified numerous other fault-related features in the Tahoe Basin (City of South Lake Tahoe 2010).

There are three faults located in the center of the City of South Lake Tahoe, with a fourth located at the southern end. These are approximately located fault traces, some associated with the Tahoe Valley Fault Zone, and are not known to be active. Numerous other faults are located in the vicinity of the City of South Lake Tahoe, including the West Tahoe fault and the Genoa fault. The inactive faults running through the City of South Lake Tahoe have shown no history of fault ruptures and do not meet the criteria for building restrictions under the Alquist-Priolo Earthquake Fault Zoning Act. The risk of fault rupture is considered relatively low (City of South Lake Tahoe 2010).

Paleontological Resources

Significant nonrenewable vertebrate and invertebrate fossils and unique geologic units have been documented throughout California. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. Paleontological potential refers to the likelihood that a rock unit will yield a unique or significant paleontological resource. All sedimentary rocks, some volcanic rocks, and some low-grade metamorphic rocks have potential to yield significant paleontological resources. Depending on the location, the paleontological potential of subsurface materials generally increases with depth beneath the surface, as well as with proximity to known fossiliferous deposits.

Pleistocene or older (older than 11,000 years) continental sedimentary deposits are considered as having a high paleontological potential while Holocene-age deposits (less than 10,000 years old) are generally considered to have a low paleontological potential because they are geologically immature and are unlikely to have fossilized the remains of organisms. Metamorphic and igneous rocks have a low paleontological potential, either because they formed beneath the surface of the earth, or because they have been altered under high heat and pressures, chaotically mixed or severely fractured. Generally, the processes that form igneous and metamorphic rocks are too destructive to preserve identifiable fossil remains.

El Dorado County is located within the Sierra Nevada geomorphic province. Based on geologic mapping, the majority of the County, especially in the Sierra Nevada Mountains, is underlain by granitic and volcanic rocks, which are generally not fossil-bearing. The geology of the County is predominantly igneous (volcanic) in nature and the type of sedimentary deposits where palaeontologic remains might be present are minimal. No comprehensive paleontological studies have been conducted within the county and, as a result, no information is available regarding the sensitivity of certain areas in El Dorado County to contain such resources. While paleontological finds could occur in river and stream gravel deposits within the County, this possibility would not be expected and is remote. Consequently, paleontology is an area of research and concern generally not applicable to the County (County 2003).

4.7.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact associated with geology, soils, or paleontological resources if the Project would:

1. Directly or indirectly cause 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; or (iv) landslides;
2. Result in substantial soil erosion or the loss of topsoil;
3. 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 the on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; and,
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.7.3 Impact Analysis

GEO-1 The proposed project would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction or landslides.

The western slope of El Dorado County is transected by the Foothills Fault System, which is a complex, braided system of individual fault segments that extends approximately 200 miles from Mariposa in the south to Lake Almanor in the north. The Lake Tahoe Basin is located in a region of active and potentially active faults including three faults located near the center of the City of South Lake Tahoe and a fourth located at its southern end. These faults have shown no history of fault ruptures and do not meet the criteria for building restrictions under the Alquist-Priolo Earthquake Fault Zoning Act.

Seismic events and related hazards could result in injury, loss of life, and/or property damage as a result of failure of structural and nonstructural building components. However, based on the characteristics of the fault system in El Dorado County, the potential for significant seismic activity to occur in the County over the planning horizon is limited (County 2003). The County may be subject to periodic seismic ground shaking events, but the potential magnitude of such events is low to moderate throughout the County, and generally increases from west to east. All new development would be subject to current CBC requirements, which would minimize the risk of structural failure of new buildings. Proper engineering, including compliance with the CBC, would minimize the risk to life and property.

Implementation of the Project would involve installation of fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. As fiber optic lines and/or utility poles would be located within previously disturbed and/or developed areas, the risk of localized ground failure is assumed to have already been minimized through previous grading, compaction, and use of engineered fills.

Design and construction of individual fiber projects would be conducted in accordance with the CBC and other applicable engineering specifications and grading regulations that would further reduce the potential for adverse effects due to seismic events or landslides. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

GEO-2 The proposed project would not result in substantial soil erosion or loss of topsoil.

Erosion is defined as a combination of processes in which the materials of the earth's surface are loosened, dissolved, or worn away, and transported from one place to another by natural agents. There are two types of soil erosion: wind erosion and water erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soil can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for

erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover.

According to the County General Plan EIR, critical slopes in the County are identified as slopes greater than 25 percent. Since much of El Dorado County is characterized as having steep slopes, there are many areas that are subject to erosion. However, there are numerous State and local regulations that limit the potential for development to substantially increase erosion.

Construction of the individual fiber projects would require ground disturbance from the following construction methods: horizontal directional drilling, plowing, trenching, microtrenching, line installation, aerial stringing, and pavement repair. The disturbed soil could be exposed to wind, water erosion, and the loss of topsoil. Any individual fiber project that disturbs over one acre of soil would be required to comply with the California Construction General Permit Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012- 0006-DWQ), which requires implementation of a Stormwater Pollution Prevention Program (SWPPP) and specific best management practices (BMPs) to prevent erosion. Typical erosion-prevention BMPs such as silt fences, stakes straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover would be used to minimize erosion impacts. Additionally, individual fiber projects implemented under the Project would be required to adhere to relevant State and local regulations, including the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*.

Therefore, if an individual fiber project would disturb more than one acre of soil, a SWPPP with project specific BMPs would be implemented. Additionally, adherence to relevant State and local regulations would adequately address the potential effects on unstable slopes and erosion. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

GEO-3 The proposed project would not 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 the on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Related secondary effects of seismic activity include liquefaction, lateral spreading, seismically induced landslides, or other ground failure. There are no Seismic Hazard Zones within El Dorado County as defined by the *Seismic Hazards Mapping Program* administered by the CGS (County 2003). Therefore, El Dorado County is not considered to be at risk from these geologic hazards and the potential for these secondary seismic effects is minimal.

Hazards associated with unstable soils or geologic units are dependent on site-specific conditions, as well as the specific nature of the individual fiber project. All new development would be subject to current CBC requirements, which would minimize the risk of structural failure of new buildings. Design and construction of individual fiber projects would be conducted in accordance with the CBC and other applicable engineering specifications and grading regulations that would further reduce the potential for adverse effects due to landslides, lateral spreading, subsidence, liquefaction, or collapse. Additionally, prior to construction of individual fiber projects, preparation of a preliminary soils/geotechnical report would be required as part of the grading permit application process. All grading activities would comply with the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*. Therefore, adherence to

relevant State and local regulations, as well as preparation of a preliminary soils/geotechnical report, would adequately address the potential risks of unstable soils. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

GEO-4 The proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) and would not create substantial direct or indirect risks to life or property.

Soils that contain high proportions of clay are referred to as expansive soils, due to the high shrink-swell potential of clay. Soil surveys typically rate shrink-swell potential in soils on a low, medium, and high basis. Generally, soil in western El Dorado County has a low to moderate shrink-swell potential. Soil located on jurisdictional lands on the western slope of El Dorado County consist of well-drained silt and gravelly loams. The majority of soil in western El Dorado County has a low to moderate shrink-swell potential; a minimal amount has been mapped as high potential. The remaining areas are typically rock formations and are not rated. In the Lake Tahoe Basin, the shrink-swell potential in soils is predominantly low (County 2003).

Individual fiber projects would be subject to the CBC Section 1808.6, which requires design features for foundations of buildings and structures in areas subject to expansive soils. Prior to construction of individual fiber projects, preparation of a preliminary soils/geotechnical report would be required as part of the grading permit application process when expansive soils are present. Recommendations identified in soils/geotechnical reports, including appropriate site and building design measures if expansive soils are present, would be incorporated in the final project plans and specifications (Sec. 15.14.030 of the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*). Preparation of a preliminary soils/geotechnical report prior to construction of individual fiber projects and adherence to CBC requirements and the *El Dorado County Grading, Erosion, and Sediment Control Ordinance* would adequately address the potential effects on expansive soils.

Additionally, the Project would not include any habitable structures and would require building permits from the El Dorado County Building Department for the proposed structures. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

GEO-5 The proposed project would not require the use of septic tanks or an alternative wastewater disposal system.

The Project would install fiber optic conduit either underground or in buried conduit, overhead on pole lines, or in a combination of both. Therefore, development resulting from the proposed Project would not use a septic or alternative water disposal system. No impact would occur.

Significance without Mitigation: No impact.

GEO-6 The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Paleontology is the study of the remains, typically fossilized, of various plant or animal species such as dinosaurs and early mammals and not the traces of human cultural activity or human remains themselves. Paleontological remains are found in sedimentary rock formations. The geology of El Dorado County is predominantly igneous (volcanic) in nature and the type of sedimentary deposits where palaeontologic remains might be present are minimal. While paleontological finds could occur in river and stream gravel deposits within the County, this possibility would not be expected and is remote. Consequently, paleontology is an area of research and concern generally not applicable to the County (County 2003).

The majority of the broadband infrastructure would be built within the typical roadway cross-section within the unincorporated areas of the County, the incorporated cities of Placerville and South Lake Tahoe, or the Caltrans' public ROW. Broadband infrastructure could also be constructed on private disturbed land and federal land and could connect to existing conduit or utility poles located within public or private utility easements. It is not anticipated that these previously disturbed portions of the Project area would contain paleontological resources. Where individual fiber projects would require drilling through rock or excavation into paleontological soil (i.e., sedimentary rocks, some volcanic rocks, and some low-grade metamorphic rocks), it is possible that intact, unique paleontological resources could be present within paleontologically sensitive rock formations and could be affected by the Project. However, given the geology of the County and that individual fiber projects would be constructed on previously disturbed and/or developed areas, the potential impacts to paleontological resources would be less significant.

Significance without Mitigation: Less than significant impact.

4.7.4 Cumulative Impacts**GEO-7 The proposed project may result in a significant cumulative impact with respect to geology and soils.**

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly cause adverse effects involving fault rupture, strong seismic ground shaking, seismic-related ground failure, or landslides; result in soil erosion or the loss of topsoil; be located on unstable soil that could result in landslide, lateral spreading, subsidence, liquefaction, or collapse; be located on expansive soil; have soils incapable of adequately supporting septic tanks; or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The context for analyzing cumulative impacts to geological and soils resources is limited to the immediate area of geologic constraint, with the exception of some geologic impacts that are regional such as earthquake risk. As discussed above under Impact GEO-1 through GEO-6, implementation of the proposed Project would result in a less than significant impact on geology and soils

The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system

management and operations, and bike and pedestrian infrastructure improvement projects. Individual fiber projects under the proposed Project could be constructed concurrently with, and in proximity to, other transportation projects in El Dorado County. While geotechnical impacts may be associated with other developments in proximity to the proposed Project, several potential impacts (e.g., unstable soils, expansive soils, liquefaction, soil erosion, and paleontological resources) are site specific, and would be addressed on a project-specific basis. Seismically induced geologic hazards and unstable soil hazards are site-specific and depend on local conditions as well as the characteristics of the overlying improvements.

Seismic impacts are a regional issue and are addressed through compliance with applicable codes and design standards. Thus, individual transportation projects (of the type included in Table 4-1) do not increase the potential for seismic events, as the effects would be based on site-specific underlying conditions and proximity to the source of the seismic event. Therefore, implementation of the proposed Project would not contribute to a greater cumulative impact to seismic ground shaking or fault rupture.

Implementation of site-specific SWPPPs would reduce the potential for erosion hazards from construction of broadband infrastructure as a result of the Project. Impacts from erosion or loss of topsoil for other cumulative projects may require site-specific analysis to determine the soil's permeability, slope, angle and length, extent of groundcover, and human influence on the sites; however, all projects in the cumulative setting would be required to adhere to similar erosion control requirements. Construction of the proposed Project, and other cumulative projects in the area, would be required to adhere to all federal, State, and local programs, requirements, and policies pertaining to building safety and construction permitting.

Paleontology is an area of research and concern generally not applicable to the County. Given the geology of the County and that individual fiber projects would be constructed on previously disturbed and/or developed areas, the potential impacts to paleontological resources from construction of the Project would be less than cumulatively considerable.

Significance without Mitigation: Less than significant impact.

4.7.5 References

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4.8 GREENHOUSE GAS EMISSIONS

This section describes the regulatory framework and existing conditions related to greenhouse gas emissions (GHGs) and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on GHG were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to GHGs.

4.8.1 Environmental Setting

4.8.1.1 Climate Change Overview

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The GHGs defined under California's Assembly Bill (AB) 32, described below, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Estimates of GHG emissions are commonly presented in carbon dioxide equivalents (CO₂e), which weigh each gas by its global warming potential (GWP). Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted. GHG emissions quantities in this analysis are presented in metric tons (MT) of CO₂e.

4.8.1.2 Greenhouse Gases

The GHGs defined under California's Assembly Bill (AB) 32 include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆).

Carbon Dioxide. CO₂ is the most important and common anthropogenic GHG. CO₂ is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO₂ include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO₂ concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO₂ concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of July 2024, the CO₂ concentration exceeded 421 ppm (National Oceanic and Atmospheric Administration [NOAA] 2024).

Methane. CH₄ is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is

extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2 . For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2 , respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e .

Historically, GHG emission inventories have been calculated using the GWPs from the Intergovernmental Panel on Climate Change's (IPCC's) Second Assessment Report (SAR). In 2007, IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. In 2013, IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5) (IPCC 2013). However, the United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values. Therefore, Statewide and national GHG inventories have not yet updated their GWP values to the AR5 values. By applying the GWP ratios, project related CO_2e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.8-1.

**Table 4.8-1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES**

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO ₂)	50-200	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-324a	14	1,430
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Source: IPCC 2007.

HFC: hydrofluorocarbon; PFC: perfluorocarbon

4.8.1.3 Regulatory Framework

This section describes federal, State, and regional environmental laws and policies that are relevant to the CEQA review process for GHG. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* that CO₂ is an air pollutant, as defined under the CAA, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO₂, CH₄, N₂O, HFC, PFC, and SF₆) threaten the public health and welfare of the American people (USEPA 2021). This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

State Regulations

There are numerous State plans, policies, regulations, and laws related to GHG emissions and global climate change. Following is a discussion of some of these plans, policies, and regulations that (1) establish overall State policies and GHG emission reduction targets; (2) require State or local actions that result in direct or indirect GHG emission reductions for the proposed project; and (3) require CEQA analysis of GHG emissions.

Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that 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 avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Executive Orders are not laws and can only provide the governor's direction to State agencies to act within their authority to reinforce existing laws.

Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of Statewide GHG emissions. CARB is directed by AB 32 to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California is on track to meet or exceed the target of reducing GHGs emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 32

Signed into law by Governor Brown on September 8, 2016, Senate Bill (SB) 32 (Amendments to the California Global Warming Solutions Action of 2006) extends California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a Statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

Assembly Bill 1279

Approved by Governor Newsom on September 16, 2022, AB 1279, the California Climate Crisis Act, declares the policy of the State to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, Statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO₂ from the atmosphere (carbon capture), and an almost complete transition away from fossil fuels.

California Air Resources Board Scoping Plan

The Scoping Plan is a strategy CARB develops and updates at least once every five years, as required by AB 32. It lays out the transformations needed across our society and economy to reduce emissions and

reach our climate targets. The current 2022 Scoping Plan is the third update to the original plan that was adopted in 2008. The initial 2008 Scoping Plan laid out a path to achieve the AB 32 mandate of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual. The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG targets. The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants (SLCPs). The 2017 Scoping Plan also assessed progress toward achieving the 2020 limit and provided a technologically feasible and cost-effective path to achieving the SB 32 mandate of reducing GHGs by at least 40 percent below 1990 levels by 2030. On December 15, 2022, CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels; further reductions in SLCPs; support for sustainable development; increased action on natural and working lands to reduce emissions and sequester carbon; and the capture and storage of carbon (CARB 2022).

Regional Regulations

Sacramento Area Council of Governments

As required by the Sustainable Communities and Climate Protection Act of 2008 (SB 375), SACOG has developed the 2020 Metropolitan Transportation Plan and Sustainable Communities Strategy. This plan seeks to reduce GHG and other mobile source emissions through coordinated transportation and land use planning to reduce vehicle miles traveled (VMT; SACOG 2019). The El Dorado County Transportation Commission has been designated as the El Dorado County Regional Transportation Planning Agency, and as such has developed the El Dorado County 2020-2040 RTP. The El Dorado County Regional Transportation Plan (RTP) does not contain an SB 375 SCS. SACOG works in coordination with the El Dorado County Transportation Commission to ensure consistency between county-specific RTPs and the broader region-wide SACOG 2020 Metropolitan Transportation Plan and Sustainable Communities Strategy.

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 65, *Air Quality/Transportation*, implements the Goals and Policies of the Air Quality sub-element for the purpose of attaining and maintaining applicable state and federal air quality standards and TRPA thresholds. Section 65.1, Air Quality Control, applies to direct sources of air pollution in the Tahoe region, including certain motor vehicles registered in the region, combustion heaters installed in the region, open burning, stationary sources of air pollution, and idling combustion engines. Section 65.2, Air Quality, Greenhouse Gas Reduction, and Mobility Mitigation Program, implements TRPA's 1992 Air Quality Plan and Goal #4, Policy 2 of the Development and Implementation Priorities sub-element, Implementation Element of the Goals and Policies in the Regional Plan, with respect to the establishment of fees and other procedures to offset impacts from indirect sources of air pollution; reduce mobile source greenhouse gas emissions per capita; and provide a more effective multimodal transportation system that reduces vehicle miles travelled per capita.

TRPA Regional Plan

GHGs are addressed within the *Transportation Element* and the Air Quality sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b).

The *Transportation Element* contains the following goal and policy that apply to the Project:

- **Goal 1: Environment.** Protect and enhance the environment, promote energy conservation, and reduce GHG.
 - **Policy 1.3:** Implement GHG reduction strategies in alignment with federal, state, tribal and regional requirements and goals.

The Air Quality sub-element contains the following goal and policies that apply to the Project:

- **Goal AQ-1:** Attain and maintain air quality in the region at levels that are healthy for humans and the ecosystem, achieve and maintain environmental thresholds and do not interfere with residents' and visitors' visual experience. It is intended that implementation of the control measures contained in the Air Quality sub-element and other TRPA programs will lead to attainment of the TRPA threshold standards and will also lead to attainment and maintenance of federal and state air quality standards.
 - **Policy AQ-1.2: Reduce or Limit Sources of Pollutants that Degrade Visibility.** Some air pollutants, such as fugitive dust and wood smoke, degrade visibility as well as harm human or ecosystem health. The Regional Plan will control those pollutants to minimize their impact on visibility, as well as their impact on human or ecosystem health.
 - **Policy AQ-1.3: Encourage the Reduction of Emissions from Motor Vehicles and other Motorized Machinery in the Region.** Significant emissions of air pollutants including GHGs, and entrained dust are produced by automobiles, motor vehicles and other gas-powered machinery in the Region. The Land Use sub-element and the *Transportation Element* contain Goals and Policies to reduce the amount of air pollution generated from motor vehicles in the Region. Additionally, TRPA shall pursue other feasible and cost-effective opportunities to reduce emissions from motor vehicles and other gas-powered machinery in the Region.

- **Policy AQ-1.7: Promote the Reduction of Air Quality Impacts from Construction and Property Maintenance Activities in the Region.**

Lake Tahoe Sustainability Communities Program

California adopted the Sustainable Communities and Climate Protection Act of 2008 requiring GHG reduction targets for passenger vehicles for 2020 and 2035 for each region covered by an MPO, and created the Strategic Growth Council, which has awarded grants for sustainable community planning and natural resource conservation. At the Lake Tahoe Region level, TRPA updated the Regional Plan to include sustainability policies and mitigation measures, and the Tahoe Metropolitan Planning Organization adopted a Sustainable Communities Strategy as required by the Sustainable Communities and Climate Protection Act of 2008. The Lake Tahoe Sustainable Communities Program (LTSCP) was developed in 2013 as a Basin-wide program with staff from different agencies and organizations participating in the various efforts (TRPA 2013).

The LTSCP consists of a series of documents, including the Sustainability Action Plan, developed in 2013. The Sustainability Action Plan provides tools to assist local governments, agencies, businesses, residents, visitors, and community groups with prioritizing and adopting consistent sustainability actions throughout the Region. The Sustainability Action Plan represents an integrated approach to reducing GHG emissions and striving toward zero-impact in all aspects of sustainability (TRPA 2013).

Local Regulations

Environmental Vision for El Dorado County

On March 25, 2008, the El Dorado County Board of Supervisors adopted the “Environmental Vision for El Dorado County” Resolution No. 29-2008, brought forward by the Youth Commission. The Resolution sets forth goals and calls 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 (County 2024). However, El Dorado County does not have an adopted Climate Action Plan or similar program-level GHG reduction plan.

El Dorado County General Plan

GHGs are addressed within the *Public Health, Safety, and Noise Element* of the El Dorado County (County) General Plan. The *Public Health, Safety, and Noise Element* contains the following goals, objectives, policies, and implementation measure that apply to the Project (County 2019):

- **Goal 6.7: Air Quality Maintenance.** Strive to achieve and maintain ambient air quality standards established by the USEPA and CARB; and minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.
 - **Objective 6.7.2: Vehicular Emissions.** Reduce motor vehicle air pollution by developing programs aimed at minimizing congestion and reducing the number of vehicle trips made in the County and encouraging the use of clean fuels.
 - **Policy 6.7.2.5:** Upon reviewing projects, the County shall support and encourage the use of, and facilities for, alternative-fuel vehicles to the extent feasible. The

County shall develop language to be included in County contract procedures to give preference to contractors that utilize low-emission heavy-duty vehicles.

- **Objective 6.7.7: Construction-related, short-term emissions.** Reduce construction related, short-term emissions by adopting regulations which minimize their adverse effects.
 - **Policy 6.7.7.1:** The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the *EDCAQMD Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under CEQA*, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide. The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.
- **Implementation Measure HS-T:** Adopt and/or update air quality regulations regarding agricultural and fuel reduction burning, construction emissions, mobile source emissions, fugitive dust, and volatile organic emissions. [Policy 6.7.7.1]

City of South Lake Tahoe Climate Action Plan

The City of South Lake Tahoe adopted the City's first Climate Action Plan (CAP) in 2020 for the purpose of reducing emissions by 2030 and 2040, which aligns with legislatively adopted state targets and goes even further to meet the local targets outlined in Resolution 2017-26, Establishing Renewable Energy and Carbon Emissions Reduction Goals. The City of South Lake Tahoe has set local targets based upon the trajectory necessary to meet and exceed the Statewide goals (City of South Lake Tahoe 2020). The CAP was prepared to serve as a long-term plan to reduce GHG emissions from community activities, as well as prepare for the impact of Climate Change. However, the CAP was not developed to meet CEQA Guidelines Sections Section 15183.5, and no thresholds of significance were developed.

City of South Lake Tahoe General Plan

GHGs are addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goals and policies that apply to the Project:

- **Goal NCR-5:** To incorporate air quality improvements and emission reductions directly with land use and transportation planning.
 - **Policy NCR-5.12: Greenhouse Gas Emission Reductions Support.** The City of South Lake Tahoe shall support local, TRPA, and Statewide efforts to reduce emission of greenhouse gases linked to climate change.
 - **Policy NCR-5.13: Citywide Greenhouse Gas Emission Inventory.** The City of South Lake Tahoe shall develop a citywide greenhouse gas emission inventory and establish regular time frames for updating the inventory.

- **Policy NCR-5.14: Greenhouse Gas Emission Reduction Target.** The City of South Lake Tahoe shall establish a greenhouse gas emission reduction target consistent with AB 32 and SB 375 reduction efforts.
- **Policy NCR-5.15: Carbon Emission Analysis and Mitigation.** The City of South Lake Tahoe shall analyze and mitigate significant increases in carbon emissions during project review pursuant to the California Environmental Quality Act.
- **Goal NCR-6:** To encourage energy conservation in new and existing developments in order to reduce greenhouse gas emissions, limit their effect on global warming, and to create a more sustainable environment.
 - **Policy NCR-6.3: Local, Clean, and Renewable Energy Support.** The City of South Lake Tahoe shall increase energy efficiency, reduce emissions and support local, clean, and renewable energy sources.
 - **Policy NCR-6.4: Increasing Economic Efficiency and Performance.** The City of South Lake Tahoe shall increase economic efficiency and performance by reducing the consumption of nonrenewable resources.
 - **Policy NCR-6.5: Creating Environmental Impact Action Tools.** The City of South Lake Tahoe shall identify action items for residents and businesses that improve energy efficiency and reduce environmental impact.

4.8.1.4 Existing Conditions

State GHG Inventories

CARB performs statewide GHG inventories. The inventory is divided into six broad sectors: agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT CO₂e. Table 4.8-2 shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2020.

**Table 4.8-2
CALIFORNIA GHG EMISSIONS BY SECTOR**

Sector	Emissions (MMT CO ₂ e)			
	1990	2000	2010	2020
Agriculture and Forestry	18.9 (4%)	30.8 (7%)	33.6 (8%)	31.6 (9%)
Commercial	14.4 (3%)	14.6 (3%)	20.1 (4%)	22.0 (7%)
Electricity Generation (In State and Imports)	110.5 (26%)	105.2 (22%)	90.6 (20%)	59.8 (14%)
Industrial	105.3 (24%)	101.2 (22%)	97.9 (23%)	85.3 (23%)
Residential	29.7 (7%)	31.5 (7%)	32.1 (7%)	30.7 (8%)
Transportation	150.6 (35%)	178.5 (39%)	168.0 (38%)	139.9 (39%)
Unspecified Remaining	1.3 (<1%)	-	-	-
TOTAL	430.7	461.9	442.3	369.2

Source: CARB 2024a and CARB 2024b

MMT = million metric tons; CO₂e = carbon dioxide equivalent; - = not reported

As shown in Table 4.8-2, statewide GHG emissions totaled approximately 431 MMT CO₂e in 1990, 462 MMT CO₂e in 2000, 442 MMT CO₂e in 2010, and 369 MMT CO₂e in 2020. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

4.8.1.5 Methodology

GHG emissions that would result from the construction of the Project were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1, as described in Section 4.3, *Air Quality*. CalEEMod output files for the Project are included in Appendix E to this program EIR.

4.8.1.6 Construction Emissions

The CalEEMod input and assumptions for modeling construction emissions are described in Section 4.3, *Air Quality*.

4.8.1.7 Operation Emissions

Operation of the individual fiber projects under the proposed Project would not result in a population increase and would not generate new vehicle trips beyond occasional maintenance activities. Individual fiber projects would produce negligible operational emissions due to the limited number of maintenance trips and therefore, operational GHG emissions were not calculated.

4.8.2 Significance Thresholds

According to Appendix G of the CEQA Guidelines, the following criteria may be considered in establishing the significance of GHG emissions:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and
2. Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

As discussed in Section 15064.4 of the CEQA Guidelines, the determination of the significance of GHG emissions calls for a careful judgment by the lead agency, consistent with the provisions in Section 15064. Section 15064.4 further provides that a lead agency should make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project.

The EDCAQMD has not established GHG thresholds of significance or other guidance for determining the significance of a land use development project's GHG impacts. For short-term construction GHG emissions, the guidance and threshold of significance from the Sacramento Metropolitan Air Quality Management District (SMAQMD) were used. The SMAQMD recommends a bright line threshold of 1,100 MT CO₂e per year to determine the significance of a project's construction GHG emissions (SMAQMD 2020). Where a qualified GHG Reduction Plan has not been adopted by the lead agency, for operational period GHG emissions, the SMAQMD recommends a screening level of 1,100 MT CO₂e per year. For all projects, regardless of project GHG emission levels, the SMAQMD requires the implementation of Tier 1 Best Management Practices (BMPs). Projects that do not implement the Tier 1 Best Management

Practices must conduct additional calculations to determine excess GHG emissions and provide measures either on-site or off-site to provide equivalent mitigation (SMAQMD 2020):

- BMP 1 - projects shall be designed and constructed without natural gas infrastructure.
- BMP 2 - projects shall meet the current CALGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle (EV) ready.

For projects which exceed 1,100 MT CO₂e per year operational screening level emissions, the SMAQMD requires implementation of Tier 2 BMPs (SMAQMD 2020):

- BMP 3 - residential projects shall achieve a 15 percent reduction in VMT per resident, office projects shall achieve a 15 percent reduction in VMT per worker compared to existing average VMT for the county, and retail projects shall achieve a no net increase in total VMT to show consistency with SB 743.

4.8.3 Impact Analysis

GHG-1 Implementation of the project would not generate GHG emissions that may have a significant impact on the environment.

Construction Emissions

The Project's temporary construction method emissions were estimated using CalEEMod as described in Section 4.8.1.5 *Methodology*. The results of the modeling of the Project's construction GHG emissions, assuming construction at up to 10 individual fiber project construction sites, are shown in Table 4.8-3. Table 4.8-3 presents the proposed Project's annual construction emissions, totaling 3.0 MT CO₂e per project site in the year 2025. As shown in Table 4.8-3, the annual Project construction emissions would not exceed SMAQMD's construction GHG emission threshold, and the impact would be less than significant. The complete CalEEMod output is provided in Appendix E to this program EIR.

**Table 4.8-3
CONSTRUCTION GHG EMISSIONS**

Year of Emissions	Emissions (MT CO₂e)
2025 (10 Sites)	30.0
<i>SMAQMD Threshold</i>	1,100
<i>Exceed Threshold?</i>	No

Source: CalEEMod (Output data is provided in Appendix E)

Additionally, construction emissions would be short term and temporary and would not result in long-term emissions. Once construction is completed and the individual fiber projects are installed, GHG emissions would be significantly reduced to negligible levels. There would be no net change in permanent GHG emissions compared to existing conditions. Therefore, impacts related to construction would be less than significant.

Operation Emissions

Operation of the individual fiber projects under the Project would not result in a population increase and would not generate new vehicle trips beyond occasional maintenance activities. An emergency

backup generator may be used at some of the individual fiber sites in the event of a power outage or for routine testing. Monthly routine testing is assumed to last 15 minutes at one time. As routine use of backup generators would be limited, individual fiber projects would produce minimal operational emissions. Therefore, the individual fiber projects would produce negligible operational emissions. Implementation of the Project would not generate operational GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts related to operational emission would be less than significant.

Impact Conclusion

The project's construction emissions would not exceed SMAQMD's GHG construction emission threshold. Additionally, operation of the individual fiber projects under the Project would not result in population increase and would not generate new vehicle trips beyond occasional maintenance activities. Therefore, the individual fiber projects would produce negligible operational emissions. Therefore, the project would not generate significant GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

GHG-2 Implementation of the project would not conflict with or obstruct implementation of applicable GHG reduction plans, policies, or regulations.

GHG emissions are addressed within the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the TRPA Regional Plan. In addition to these environmental documents, the City of South Lake Tahoe also approved the CAP on October 20, 2020. The CAP was prepared to serve as a long-term plan to reduce GHG emissions from community activities, as well as prepare for the impact of Climate Change. However, the CAP was not developed to meet CEQA Guidelines Sections Section 15183.5, and no thresholds of significance were developed. El Dorado County does not have an adopted Climate Action Plan or similar program-level GHG reduction plan.

As discussed under Impact GHG-1, the annual Project construction emissions would not exceed SMAQMD's construction GHG emission threshold. Additionally, implementation of the Project would not generate operational GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, the Project would be consistent with the El Dorado County General Plan, City of South Lake Tahoe General Plan, City of South Lake Tahoe CAP, and SMAQMD construction GHG thresholds. The impact would be less than significant.

Significance without Mitigation: Less than significant impact.

4.8.4 Cumulative Impact

GHG-3 The proposed project would not contribute to a significant cumulative impact to regional and State GHG emissions.

As noted above, climate change impacts are cumulative. Given the relatively small levels of emissions generated by a project in relationship to the total amount of GHG emissions generated on a national or global basis, individual fiber projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to

climate change. This analysis of cumulative impacts is based on impacts of the proposed Project and the other cumulative transportation projects in the County. As shown in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis, numerous transportation projects are planned and/or programmed within the County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian facilities projects. The vast majority of these cumulative projects involve existing transportation infrastructure.

As demonstrated in Impacts GHG-1 and GHG-2 above, the proposed Project would not result in a cumulatively considerable contribution to significant cumulative GHG emissions and would not conflict with or obstruct applicable plans related to GHG emission reductions. Therefore, the Project's contribution to global climate change would be less than cumulatively considerable.

Significance without Mitigation: Less than significant impact.

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4.9 HAZARDS AND HAZARDOUS MATERIALS

This section describes the regulatory framework and existing conditions related to hazards and hazardous materials and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to hazards and hazardous materials.

4.9.1 Environmental Setting

4.9.1.1 Overview of Hazards and Hazardous Materials

For purposes of this section, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the Code of Federal Regulations (CFR) as “a substance or material that ... is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous wastes” are defined in California Health and Safety Code Section 25141(b) as wastes that:

... because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

4.9.1.2 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for hazards and hazardous materials. These policies provide context for the impact discussion related to the proposed Project’s consistency with the applicable regulatory conditions.

Federal Regulations

Resource Conservation and Recovery Act of 1976

Federal hazardous waste laws are largely promulgated under the Resource Conservation and Recovery Act (RCRA; 40 CFR, Part 260), as amended by the Hazardous and Solid Waste Amendments of 1984 (which are primarily intended to prevent releases from leaking underground storage tanks). These laws provide for the “cradle to grave” regulation of hazardous wastes. Specifically, under RCRA any business, institution or other entity that generates hazardous waste is required to identify and track it from the

point of generation until it is recycled, reused, or disposed of. The U.S. Environmental Protection Agency (USEPA) has the primary responsibility for implementing RCRA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions.

Hazardous Material Transportation Act

The U.S. Department of Transportation (DOT) regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations (CFR), which requires the U.S. DOT'S Office of Hazardous Materials Safety to generate regulations for the safe transportation of hazardous materials. The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. These agencies also govern permitting for hazardous materials transportation within the State.

Caltrans has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code. Requests for such special permits require the completion and application for a Transportation Permit.

Comprehensive Environmental Response, Compensation, and Liability Act

The 1980 Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Federal actions related to the Superfund are limited to sites on the National Priorities List for cleanup activities, with the listings based on the USEPA Hazard Ranking System which is a numerical ranking system used to screen potential sites based on criteria such as the likelihood and nature of hazardous material release, and the potential to affect people or environmental resources. The Superfund was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986 as outlined below.

Superfund Amendments and Reauthorization Act

SARA is intended primarily to address the emergency management of accidental releases, and to establish State and local emergency planning committees responsible for collecting hazardous material inventory, handling, and transportation data. Specifically, under Title III of SARA, a nationwide emergency planning and response program established reporting requirements for businesses that store, handle or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. Title III of SARA also requires each State to implement a comprehensive system to inform federal authorities, local agencies and the public when significant quantities of hazardous or acutely toxic substances are stored or handled at a facility. These data are made available to the community at large under the "right-to-know" provision, with SARA also requiring annual reporting of continuous emissions and accidental releases of specified compounds.

Federal Aviation Regulations

Federal Aviation Regulations Title 14 Part 77 (FAR Part 77) addresses the safe, efficient use, and preservation of navigable airspace. The purpose of the FAR Part 77 is to establish the following:

- The requirements to provide notice to the Federal Aviation Administration (FAA) of certain proposed construction, or the alteration of existing structures;
- The standards used to determine obstructions to air navigation, and navigational and communication facilities;
- The process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities or equipment; and
- The process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations.

Section 77.9 of FAR Part 77 lists the types of construction or alterations that require filing notice with the FAA, including any construction or alteration more than 200 feet above ground level at its site.

State Regulations

California hazardous materials and waste regulations are equally or more stringent than federal regulations. The USEPA has granted the State primary oversight responsibility to administer and enforce hazardous waste management programs. State regulations require planning and management to ensure that hazardous materials are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several important State laws pertaining to hazardous materials and waste are discussed below.

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was created in 1991, unifying California's environmental authority in a single cabinet-level agency and bringing the California Air Resources Board, State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCB), California Department of Resources Recycling and Recovery (formerly the Integrated Waste Management Board), Department of Toxic Substances Control (DTSC), Office of Environmental Health Hazard Assessment, and Department of Pesticide Regulation under one agency. These agencies were placed within the CalEPA as the "umbrella" for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Its mission is to restore, protect, and enhance the environment, to ensure public health, environmental quality, and economic vitality.

California Department of Toxic Substances Control

The DTSC, which is a department of the CalEPA, is authorized to carry out the federal hazardous waste program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California. Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow federal and State requirements and

other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

California Division of Occupational Safety and Health

Occupational safety standards exist in federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) and the federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for assuring worker safety in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices within the state. At sites known to be contaminated, a site safety plan must be prepared to protect workers. The site safety plan establishes policies and procedures to protect workers and the public from exposure to potential hazards to the contaminated site.

California Building Code

The State of California provided a minimum standard for building design through the California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations (CCR). The CBC is based on the 2015 International Building Code but has been modified for California conditions. The CBC is updated every three years, and the current 2022 CBC went into effect January 1, 2023. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local county building officials for compliance with the typical fire safety requirements of the CBC, including the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Fire Code

The California Fire Code (CFC) is Part 9 of CCR Title 24, Building Standards Code. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, fire hydrant locations and distribution, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. Chapter 49 of the CFC contains requirements for Wildland-Urban Interface (WUI) areas and prescribes construction materials and methods in fire hazard severity zones (FHSZ); requirements generally parallel CBC Chapter 7A. The CFC is updated on a three-year cycle; the current 2022 CFC took effect on January 1, 2023.

California Public Resources Code

California Public Resources Code (PRC) Sections 4291 *et seq.* require that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that are maintained so as to manage fuels and not form a means of rapid fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the CFC.

State Responsibility Areas (SRA) are defined by PRC Section 4102 as areas of the State in which the California Board of Forestry and Fire Protection has determined that the financial responsibility for

preventing and suppressing fires lies with the State of California. SRAs are lands in California where the California Department of Forestry and Fire Protection (CAL FIRE) has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value. In practice, some local government agencies (in this case, local volunteer fire districts), may also provide first response in some SRAs, in coordination with their local CAL FIRE unit. PRC Sections 4201-4204 directs CAL FIRE to map fire hazards within SRAs based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These FHSZ classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone.

Federal Responsibility Areas (FRA) are lands owned and managed by the federal government, which bears regulatory and financial responsibility for wildfire prevention and suppression on those lands.

Local Responsibility Areas (LRA) include lands that do not meet criteria for SRAs or FRAs, or are lands in incorporated areas, cultivated agricultural lands, and nonflammable areas in the unincorporated parts of a county. LRAs can include flammable vegetation and wildland-urban interface areas. LRA fire protection is provided by city or local fire departments, fire protection districts, county fire departments, or by contract with CAL FIRE.

PRC Section 4290 requires the California Board of Forestry and Fire Protection to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within SRAs and lands within Very High Fire Hazard Severity Zones (VHFHSZ) of LRAs.

California Emergency Management Agency

The California Emergency Management Agency adopted the State Hazard Mitigation Plan in 2007. This plan is the official statement of California's statewide hazard mitigation goals, strategies, and priorities. Hazard mitigation can be defined as any action taken to reduce or eliminate long-term risk to life and property by natural and human caused disasters. The plan, required under federal law, includes chapters on hazard assessment, local hazard mitigation planning, and mitigation strategy, and it must be updated every three years.

2024 Strategic Plan

The CAL FIRE Strategic Plan 2024 sets forth the vision and direction of CAL FIRE over the coming years. The Plan represents a reflective and collaborative effort in identifying operational opportunities, key issues, and summarizing future strategies that will drive improvement. The Plan is also a tool for measuring progress toward embodying CAL FIRE's values and associated behaviors in pursuit of our goals and objectives. The following goals were identified in the CAL FIRE Strategic Plan 2024 (CAL FIRE 2024a):

1. Improve Our Core Capabilities
2. Enhance Internal Operations
3. Ensure Health and Safety
4. Build an Engages, Motivated, Innovative Workforce

Regional Regulations and Plans

2024 Strategic Fire Plan – CAL FIRE Amador-El Dorado Unit

El Dorado County is located within the jurisdiction of CAL FIRE’s Amador-El Dorado Unit (AEU). The goal of the AEU is to reduce the loss of life, property, watershed values, and other assets at risk from wildfire through a focused pre-fire management program and increased initial attack success. The purpose of the 2024 Strategic Fire Plan is to provide effective direction to departmental staff and communities within the Administrative Unit to direct resources and personnel commitments towards the implementation of this Strategic Fire Plan (CAL FIRE 2024b).

Regional Water Quality Control Boards

The Porter-Cologne Water Quality Act established the State Water Resources Control Board and divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Basin. The Central Valley RWQCB (CVRWQCB) regulates water quality in the western slope of El Dorado County (County) and the Lahontan RWQCB (LRWQCB) regulates water quality in the eastern portion of the County and the City of South Lake Tahoe. The CVRWQCB and LRWQCB are responsible for establishing water quality standards in the County and have the authority to require groundwater investigations when the quality of groundwater or surface waters of the State is threatened and to require remediation actions, if necessary.

Tahoe Regional Planning Agency

The eastern portion of El Dorado County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe’s importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 35, *Natural Hazard Standards*, sets forth regulations pertaining to recognition of natural hazards, prevention of damage to property, and protection of public health relating to such natural hazards. It implements provisions of the Goals and Policies and the Water Quality Management Plan for the Lake Tahoe Region pertaining to avalanche and mass instability, floodplains, and wildfire.

Chapter 61, *Vegetation and Forest Health*, regulates the management of forest resources to achieve and maintain the environmental threshold standards for species and structural diversity, to promote the long-term health of natural resources, to restore and maintain suitable habitats for native wildlife species, and to reduce accumulations of hazardous fuels in order to decrease the likelihood of catastrophic wildfire events.

TRPA Regional Plan

Hazards and hazardous materials are addressed within the Natural Hazards sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b). The Natural Hazards sub-element contains the following goal and policy that apply to the Project:

- **Goal NH-1:** Risks from natural hazards (e.g., flood, fire, avalanche, earthquake, seiche) will be minimized. Land use within the Tahoe Region should be planned with recognition of natural hazards so as to help prevent damage to property and to protect public health. Natural hazard areas or situations can be identified and precautionary measures taken to minimize impacts.
 - **Policy NH-1.2:** Prohibit additional development, grading, and filling of lands within the 100-year flood plain and in the area of wave run-up except for public recreation facilities, public service facilities, necessary crossings, restoration facilities, and as otherwise necessary to implement the goals and policies of the Pla. Require all facilities located in the 100-year flood plain and area of wave run-up to be constructed and maintained to minimize impacts on the flood plain. The Tahoe Region is often subject to rain or storm events which cause extreme fluctuations in stream flows or wave run-up which can result in flooding and damage to property. Grading, filling, and structural development within the flood plain causes alteration of the stream flow and may accentuate downstream flooding.

Local Regulations and Plans

Airport Land Use Commissions in El Dorado County

In 1967, the State of California amended the State Aeronautics Act (Pub. Util. Code, § 21670 et seq.) by adding a requirement for the establishment of airport land use commissions (ALUCs) in counties with one or more airports serving the general public. In 1970, the legislature further amended the State Aeronautics Act requiring each ALUC to develop airport land use compatibility plans (ALUCPs) for areas around public-use and military airports in their jurisdiction. ALUCs are charged with assisting local agencies in ensuring compatible land uses in the vicinity of all new airports or heliports and existing airports or heliports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses (Pub. Util. Code, § 21674). They are also charged with coordinating planning at the state, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare (Pub. Util. Code, § 21674(b)); to prepare and adopt airport land use plans; and to review and make recommendations concerning specified plans, regulations and other actions of local agencies and airport operators.

Although standards established by the FAA form the basis of the safety and noise restrictions, each ALUC is responsible for adopting and tailoring these standards to the specific airport and for enforcing them. The ALUCP is the primary document used by an ALUC to promote compatibility between an airport and the surrounding area. More specifically, the ALUCP is regulatory in nature and should act as a guide for the ALUC and local jurisdictions in safeguarding the general welfare of the public as the airport and the area surrounding the airport grows. The ALUCP also serves as a tool for the ALUC in fulfilling its duty to review airport and land use development proposals within the airport influence area. The ALUCP is the key to implementation of ALUC policies related to proposed land development in the vicinity of the airport. The ALUCP provides the standards, criteria, and policies on which the compatibility of proposed local land use policy actions is determined. The ALUCP also establishes the

planning boundaries around airport that define noise, safety, airspace protection, and overflight notification, for policy implementation.

El Dorado County has four airports: Cameron Airpark, Georgetown Airport, Placerville Airport, and Lake Tahoe Airport. The El Dorado County Transportation Commission (EDCTC) is the designated ALUC for the three airports within the west slope of the County, Cameron Airpark, Georgetown Airport, and Placerville Airport, and maintains an individual ALUCP for each airport (EDCTC 2012). The South Lake Tahoe ALUC is the designated ALUC for the Lake Tahoe Airport and maintains the Lake Tahoe ALUCP. The EDCTC and South Lake Tahoe ALUCs provide technical and advisory support to the County's airports, and serve four primary functions under the State Aeronautics Act of the California Public Utilities Code commencing with Section 21670 (Division 9, part 1, Chapter 4, Article 3.5):

- Develop and adopt land use standards to minimize public exposure to safety hazards and excessive levels of noise;
- Prevent encroachment of incompatible land uses around public-use airports;
- Prepare an Airport Land Use Compatibility Plan for the area around each public use airport defining compatible land uses for safety, density, height, and noise; and
- Perform land use consistency determinations for proposed projects within each ALUCP.

El Dorado County Environmental Management Department

The El Dorado County Environmental Management Department (EMD) is responsible for ensuring compliance with applicable State laws, regulations, and County ordinances concerning public health and safety issues. The EMD includes various departmental units, such as: the Environmental Health Unit, which addresses food facilities, domestic wells, small water systems, septic systems, public pools and spas, and public health issues; the Hazardous Materials Unit, which addresses the implementation of hazardous materials and household hazardous waste programs to ensure proper management and disposal; and the Solid Waste Unit, which addresses the implementation of the County's solid waste and recycling programs to ensure safe handling and proper disposal of residential and commercial solid waste (County 2024a).

El Dorado County Office of Emergency Services

The County's Office of Emergency Services (OES) is managed by the County Sheriff's Office and coordinates overall response through the Emergency Operations Center (EOC). In addition to State coordination, OES collaborates with the County's fire districts, emergency medical services agency, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills. OES updates and maintains local emergency response plans, provides Countywide training and exercises to the County, offers active violence training to County agencies and schools, maintains and exercises the emergency notification systems, and provides public education and information on preparing for disasters. In 1994, the County Board of Supervisors designated the Sheriff's Office the responsibility for managing the County's OES. Sheriff's Office employees assigned to the OES work in collaboration with Fire services, Emergency Medical Services, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills (County 2003; County 2024b).

The County OES provides emergency alerts through the El Dorado County Emergency Alerts powered by Rave. The County OES recently implemented Perimeter Platform to improve emergency operations and communication channels with the public during critical situations. Although the Perimeter Platform is not an alerting platform, it provides vital information for residents during crises, particularly wildfires (County 2024b).

El Dorado County Emergency Operations Plan

The El Dorado County Emergency Operations Plan (EOP) serves as the official emergency plan document in the County. The EOP was revised in 2023 to bring it into compliance with the California Emergency Services Act, the Standardized Emergency Management System (SEMS), and the federal National Incident Management System (NIMS). The EOP is the principal guide for the agencies of El Dorado County and other local government entities to prevent, prepare, respond, and recover from emergencies disasters affecting El Dorado County. Secondly, this plan is intended to facilitate multi-agency and multi-jurisdictional coordination, particularly between local, State, and federal agencies in emergency operations (County 2024b).

El Dorado County Office of Wildfire Preparedness and Resilience

The El Dorado County Office of Wildfire Preparedness and Resilience (OWPR) was established by the County Board of Supervisors in 2022 to coordinate the planning and implementation of wildfire mitigation activities across the County. OWPR prepared the El Dorado County Wildfire Strategy, a comprehensive wildfire prevention and preparedness strategy for El Dorado County that fosters the creation, coordination and maintenance of fire adapted communities and is in alignment with federal, State, and local policies, plans and initiatives.

El Dorado County Hazardous Waste Management Plan

The El Dorado County Hazardous Waste Management Plan (CHWMP) contains a synopsis of the hazardous waste setting in the County and recommends goals, objectives, policies, and programs for hazardous waste management and facility needs. Specific programs recommended by the CHWMP include a Comprehensive Hazardous Materials and Hazardous Waste Inspection and Monitoring Program, a Hazardous Materials Release Response Plan and Inventory, hazardous waste inspections, hazardous waste programs for small businesses and for households, and a Hazardous Materials and Hazardous Waste Data Information System (County 2003).

El Dorado County Multi-Jurisdictional Hazard Mitigation Plan

El Dorado County is preparing a Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) update to the 2019 El Dorado County Local Hazard Mitigation Plan (LHMP) approved by FEMA. The Draft MJHMP was released in 2024. The purpose of the MJHMP update is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. Four jurisdictions also participated in the County MJHMP through supplemental annexes to the document, including: the City of Placerville, Cameron Park Community Services District, El Dorado County Office of Education, and Georgetown Divide Public Utility District. The MJHMP was developed to ensure El Dorado County and participating jurisdictions' continued eligibility for certain federal disaster assistance: specifically, the FEMA Hazard Mitigation Grant Program, the Building Resilient Infrastructure and Communities Grant Program, and the Flood Mitigation Assistance Grant Program.

The MJHMP was prepared consistent with the Health and Safety Element (Safety Element) of the County General Plan, as the planning effort covers common overlapping natural hazard issues and mutually reinforcing policies and implementation programs. The MJHMP and Safety Element are considered complimentary documents that address natural hazards, and both planning documents contain goals and project actions or implementation programs to enhance the County's mitigation efforts related to public safety. California Government Code Section 65302.10, also referred to as Assembly Bill (AB) 2140 encourages California counties and cities to adopt their current, FEMA-approved LHMPs into the Safety Element of their General Plan (County 2024c).

El Dorado County Code

Chapter 8.08, *Fire Hazard Ordinance*, requires defensible space as described by the PRC, including the incorporation and maintenance of a 30-foot fire break or clearing around structures. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law. The *Fire Hazard Ordinance* also establishes limits on campfires, fireworks, smoking, and incinerators. The ordinance is applicable to all developments in the County, including all discretionary and ministerial developments.

Chapter 8.09, *Hazardous Vegetation and Defensible Space Ordinance*, provides for the removal of hazardous vegetation and combustible materials situated in the unincorporated areas of the County so as to reduce the potential for fire and to promote the safety and welfare of the community. This ordinance applies to the abatement of the growth and/or accumulation of weeds, grasses, shrubs, dormant brush, slash, tree limbs, hazardous vegetation and combustible materials on all Improved Parcels and designated Unimproved Parcels within the County and maintenance of those parcels to prevent vegetation from growing back.

Chapter 8.38, *Hazardous Materials Ordinance*, regulates the handling, storage, use, transport, processing, or disposal of hazardous materials. The ordinance establishes requirements for businesses that are consistent with the California Health and Safety Code and the CCR. Requirements include the reporting of hazardous materials, disclosure of accidental release of hazardous materials, and preventative and mitigative measures for impacts resulting from hazardous materials. The ordinance requires a valid permit to conduct activities regulated by the chapter.

Chapter 8.42, *Solid Waste Management Ordinance*, prohibits the depositing or disposal of hazardous or biomedical waste onto land, into soil, rock, air, or water or at an unauthorized disposal site, transfer stations, resource recovery facilities, transformation facilities, buy back centers, drop off recycling centers, or any container to be collected and ultimately deposited, unless otherwise approved by the County. Penalties may be assessed on acts of illegal disposal.

Chapter 130.32, *Flood Damage Prevention Ordinance*, implements General Plan Policy 6.4.1.1 requiring continued participation in the National Flood Insurance Program in order to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. This Chapter serves to provide legally enforceable regulations applied uniformly throughout the community to all publicly and privately owned land within flood prone areas.

El Dorado County General Plan

Hazards and hazardous materials are addressed within the *Public Health, Safety, and Noise Element* of the County General Plan. The *Public Health, Safety, and Noise Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2019):

- **Goal 6.1: Coordination.** A coordinated approach to hazard and disaster response planning.
 - **Objective 6.1.1: El Dorado County Multi-Jurisdictional Local Hazard Mitigation Plan.** The El Dorado County LHMP shall serve as the implementation program for this Goal.
 - **Policy 6.1.1.1:** The El Dorado County LHMP shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County and is incorporated by reference to this Element. The County will ensure that the LHMP is updated on a regular basis to keep pace with the growing population.
- **Goal 6.2: Fire Hazards.** Minimize fire hazards and risks in both wildland and developed areas.
 - **Objective 6.2.2: Limitations to Development.** Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.
 - **Policy 6.2.2.1:** Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.
 - **Objective 6.2.4: Area-Wide Fuel Management Program.** Reduce fire hazard through cooperative fuel management activities.
 - **Policy 6.2.4.1:** Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.
 - **Policy 6.2.4.2:** The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.
- **Goal 6.3: Geologic and Seismic 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 County DOT 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.
- **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 6.6.1.1:** The Hazardous Waste Management Plan shall serve as the implementation program for management of hazardous waste in order to protect the health, safety, property of residents and visitors, and to minimize environmental degradation while maintaining economic viability.
- **Goal 6.8: Aviation-Related Hazards.** Minimize aviation-related hazards in and around existing and future airports.
 - **Objective 6.8.1: Safety Hazards Exposure.** Minimize the public's exposure to airport-related safety hazards by requiring new development around airports to be compatible with that use.
 - **Policy 6.8.1.1:** All development within the Airport Influence Area of the Placerville Airport, the Cameron Airpark, and the Georgetown Airport shall comply with El Dorado County Airport Land Use Commission's policies and maps as set forth in the Airport Land Use Compatibility Plan for each airport. All development within the Airport Influence Area of the South Lake Tahoe Airport shall comply with the ALUCP for the areas around the South Lake Tahoe Airport. Where there is a difference between the County development standards and the development standards of the Airport Land Use Compatibility Plan, as applied to proposed development, the standards that will most reduce airport-related hazards shall apply.

- **Implementation Measure HS-A:** Maintain emergency response procedures and programs, including agreements with other local, state, and federal agencies, to provide coordinated disaster response and programs to inform the public of emergency preparedness and response procedures. [Policy 6.1.1.1]
- **Implementation Measure HS-B:** Work with the local Fire Safe Councils, fire protection districts, U.S. Forest Service (USFS), and CAL FIRE to develop and implement a Countywide Wildfire Safety Plan. The Wildfire Safety Plan shall focus on, but not be limited to, the following:
 - Public wildfire safety education;
 - Basic fire protection standards for different areas of the County;
 - Appropriate mitigation for development in areas having high and very high fuel hazards;
 - Opportunities for fire fuel reduction;
 - Implementation of fire safe standards;
 - Coordination with fire protection districts
 - Fuels management standards to apply to new development adjacent to forested areas and within greenbelts; and
 - Appropriate standards for open space and greenbelts. [Policy 6.2.4.2]
- **Implementation Measure HS-D:** Develop and adopt standards to protect against seismic and geologic hazards. [Objective 6.3.1]
- **Implementation Measure HS-M:** Maintain and update the Hazardous Waste Management Plan for management of hazardous waste to protect the health, safety, and property of residents and visitors, and to minimize environmental degradation. [Policy 6.6.1.1]
- **Implementation Measure HS-V:** Amend prescriptive standard for the Fugitive Dust Prevention and Control Plan and Contingent Asbestos Hazard Dust Mitigation Plan. [Policy 6.3.1.1]

Greater Placerville Wildfire Evacuation Preparedness, Community Safety, and Resiliency Study

The El Dorado County Transportation Commission (EDCTC), in collaboration with the City of Placerville, El Dorado County, the El Dorado and Georgetown Resource Conservation District, CAL FIRE, and other first responders, prepared the Greater Placerville Wildfire Evacuation Preparedness, Community Safety, and Resiliency Study (Study) in June 2024 to address the study area’s growing vulnerability to wildfire events and identify road and other infrastructure improvements needed to help communities become fire adapted and resilient to the risk of wildfire.

The intent of this Study is to evaluate multiple wildfire scenarios, identify high-risk communities, assess the transportation network for points of catastrophic failure, engage and inform the community of these findings, and present an account of these conditions and recommendations in a wildfire evacuation preparedness study for the Greater Placerville area. The scope of this wildfire evacuation assessment is based on the behavior and movement of motor vehicles during evacuation events. This Study does not ensure that wildfires or evacuation routes will unfold precisely as depicted in the Study nor does it

identify any evacuation routes to be taken by the public. Evacuation orders and evacuation route designation are the purview and responsibility of the El Dorado County Sheriff's Office (EDCTC 2024).

City of Placerville Annex – El Dorado County MJHMP

While the City of Placerville Annex is not a stand-alone plan, it serves as a supplement to the hazard information provided in the County MJHMP Base Plan document. All other sections of the County MJHMP, or Base Plan, including the sections on the planning process, Countywide risk assessment, and procedural requirements related to plan implementation and maintenance apply to the City of Placerville (County 2024c).

City of Placerville City Code

Chapter 7.16 is known as the *Hazardous Vegetation and Combustible Materials Abatement Ordinance*. The purpose of this chapter is to provide for the removal of hazardous vegetation and combustible materials situated in Placerville City limits so as to reduce the potential for fire and to promote the public safety and welfare of the community.

City of Placerville General Plan

Hazards and hazardous materials are addressed within *Section VI – Health and Safety* of the City of Placerville General Plan (City of Placerville 2004). The *Health and Safety* section contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal D:** To prevent loss of lives, injuries, and property damage due to wildland and urban fires.
 - **Policy 1:** Areas of high and extreme fire hazards shall be the subject of special review, and building and higher intensity uses shall be limited unless the hazards are mitigated to a point acceptable by the Fire Department.
 - **Policy 7:** All new development shall be required to meet the minimum fire flow rates and other standards specified by the City of Placerville's Fire Code.
 - **Policy 16:** The City of Placerville shall strive to restrict vehicular access and recreational use of undeveloped foothill areas during critical fire hazard periods.
- **Goal F:** To protect Placerville residents from the effects of hazardous materials.
 - **Policy 1:** Approvals of all new development in the City of Placerville shall consider the potential for the production, use, storage, and transport of hazardous materials and provide for reasonable controls on such hazardous materials.
 - **Policy 2:** Within its authority, the City of Placerville shall regulate the production, use, storage, and transport of hazardous materials to protect the health of Placerville residents.
- **Goal J:** To promote land use development surrounding the Placerville Airport that is compatible with the noise, safety, airspace protection, overflight and other special characteristic policies and maps of the Placerville ALUCP.

- **Policy 2:** The City of Placerville shall ensure that land use approvals in the City are consistent with the Placerville Airport Land Use Compatibility Plan through the adoption of an airport overlay zone that references the policies and maps of the ALUCP.
- **Implementation Program 2:** The City of Placerville shall maintain an official Geological Map showing basic geology and the location of geological hazards. The Geological Map shall be regularly updated on the basis of geological reports prepared and filed in connection with development projects and water well logs and subsurface information developed in connection with public projects.
- **Implementation Program 10:** The City of Placerville shall adopt an ordinance requiring businesses manufacturing, storing, using, or transporting significant quantities of hazardous materials to identify annually such materials and their quantities. The City of Placerville shall maintain current inventory of such materials by location for use by the Fire Department and the Development Services Department.

City of South Lake Tahoe Local Hazard Mitigation Plan

The City of South Lake Tahoe LHMP was updated in 2021-2022 to identify resources, information, and strategies for reducing risk from natural hazards. The LHMP update covers both natural and human-health hazards. This plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000, which allows the City of South Lake Tahoe to be eligible for FEMA's Pre-Disaster Mitigation and Hazard Mitigation Grant programs (City of South Lake Tahoe 2022).

City of South Lake Tahoe City Code

Chapter 6.15, *Building Regulations*, provides minimum requirements and standards for the protection of public safety, health, property and welfare of the City of South Lake Tahoe, and prescribes regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, moving, demolition, occupancy, equipment use, height and area of buildings and structures.

Chapter 6.55.200, *Airport Land Use Planning*, applies to all areas located within the airport overlay (AO) zoning district, which is equivalent to the area defined as the airport influence area (AIA) in the ALUCP. The AIA boundaries define areas where noise, safety, airspace protection, and overflight notification policies and compatibility criteria are applied to certain land use policy actions. Land uses and structures within the AO district shall comply with the development, policies, standards and requirements of the ALUCP.

Chapter 7.20, *Grading, Erosion and Sediment Control*, is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) To avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and (3) To ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and state or federal law, this chapter shall prevail unless preempted by the state or federal law. In the event

of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Hazards and hazardous materials are addressed within the *Health and Safety Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Health and Safety Element* contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal HS-1:** To plan for, train for, and respond to major incidences and disasters in order to minimize loss of life, major injury, and loss of property.
 - **Policy HS-1.1: Local Emergency Operations Plan Review and Update.** The City of South Lake Tahoe shall continue to periodically review and update the City's Local Emergency Operations Plan (LEOP). The City shall update the LEOP and Emergency Management Plan to include planning and response provisions for Seiche wave hazards. This would include a warning process of when area earthquake events are of 7 magnitude or greater that could generate a Seiche wave and a notification and evacuation process for residents, employees, and visitors. This may include the provision of directional signage to guide evacuees to areas outside of the Seiche wave hazard zone.
 - **Policy HS-1.4: Disaster Staging Area.** The City of South Lake Tahoe shall identify pre-planned areas throughout the city for disaster staging and evacuations. However, the City shall use the Lake Tahoe Airport, or alternate location as appropriate, as the primary disaster staging area and evacuation point for residents, employees, and visitors.
 - **Policy HS-1.7: Emergency and Disaster Preparedness Exercises.** The City of South Lake Tahoe should coordinate with local, regional, State, and Federal agencies to conduct emergency and disaster preparedness exercises in order to test operational and emergency plans. Policy
 - **Policy HS-1.9: Local Hazard Mitigation Plan.** The City of South Lake Tahoe shall maintain and implement the Local Hazard Mitigation Plan to identify natural hazards, minimize or eliminate their effects and reduce prospective costs of reparations before any natural hazard takes place.
- **Goal HS-6:** To protect and maintain the safety of residents, businesses, and visitors by reducing, and where possible, eliminating exposure to hazardous materials, waste, and natural substances.
 - **Policy HS-6.1: Hazardous Waste Disclosure.** The City of South Lake Tahoe shall require existing and new commercial and industrial uses involving the use, handling, transport, or disposal of hazardous materials within the City to disclose their activities in accordance with El Dorado County guidelines and the requirement of state law.
 - **Policy HS-6.2: Construction Activity Stoppage due to Contamination.** The City of South Lake Tahoe shall require that construction activities cease if contamination is discovered on construction projects until the contamination is reported and its extent is assessed,

delineated, and isolated, as appropriate. Remediation shall occur to the satisfaction of the appropriate responsible agency (such as the El Dorado County EMD, Hazardous Waste Division, the LRWQCB, the Department of Toxic Substances Control, or the City of South Lake Tahoe, depending on the type of contamination.

- **Policy HS-6.5: Hazardous Waste Transportation.** The City of South Lake Tahoe shall require local hazardous waste collection providers to transport hazardous waste during non-peak hours in order to reduce traffic and lessen risks of public exposure to dangerous materials.
- **Goal HS-7:** To protect and maintain the safety of residents, businesses, and visitors by reducing the threat of aircraft hazards.
 - **Policy HS-7.1: Comprehensive Airport Land Use Plan Compliance.** The City of South Lake Tahoe shall maintain and implement the Comprehensive Airport Land Use Plan for the Lake Tahoe Airport, and ensure that no conflicting land uses are located inside the Lake Tahoe Airport overflight zones.
- **Implementation Program IMP-7.6: Natural Hazard Mitigation Plan.** The City of South Lake Tahoe shall regularly update the Natural Hazard Mitigation Plan to incorporate the latest wildland fire and urban interface standards, identify natural hazards, minimize or eliminate their effects, and reduce prospective costs of reparations before any natural hazard takes place. [Policy HS-1.9]
- **Implementation Program IMP-7.7: Local Emergency Operations Plan Review.** The City of South Lake Tahoe shall continue to periodically review and update the City's LEOP. [Policy HS-1.1]
- **Implementation Program IMP-7.8: Disaster Preparedness Plan.** The City of South Lake Tahoe shall maintain and regularly update the Disaster Preparedness Plan. [Policy HS-1.7]

4.9.1.3 Existing Conditions

Hazardous Materials

Hazardous materials in El Dorado County are regulated through a combination of federal, State, and local regulations to ensure their safe handling, storage, transportation, and disposal. Several agencies and departments play a role in overseeing and enforcing these regulations. At the federal level, the USEPA sets standards and regulations for hazardous materials under various laws, such as RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These regulations govern the proper management, storage, and disposal of hazardous materials and address issues related to hazardous waste, contaminated sites, and emergency response. At the State level, the DTSC has authority over hazardous materials and hazardous waste management. They establish regulations and programs to ensure the safe handling, storage, and disposal of hazardous materials, including requirements for permits, inspections, and reporting.

Hazardous Waste Generation and Storage

Within El Dorado County, the Hazardous Materials Unit of the County Environmental Management Department addresses the implementation of hazardous materials and household hazardous waste

programs to ensure proper management and disposal. They enforce local ordinances and regulations pertaining to hazardous materials storage, handling, and disposal. This includes permitting and inspection of facilities that handle hazardous materials, responding to hazardous materials incidents, and providing guidance and education to businesses and the community on safe practices.

The EMD collects information on the types and quantities of waste generated and stored via the Certified Unified Program business plan inventory program. Hazardous waste contingency plans are collected from all generators, and generators storing more than 55 gallons, 500 pounds, or 200 cubic feet of hazardous waste must also submit inventories. The hazardous materials may be stored in aboveground storage tanks (ASTs), underground storage tanks (USTs), drums, and other types of containers. Typically, USTs are used by businesses, such as gasoline stations. Many households store heating fuel such as propane in ASTs. Because residences are exempt from reporting the use of hazardous materials, many ASTs and USTs are not registered with the County or other public agencies (County 2003).

Hazardous waste generated in El Dorado County originates from small businesses, industry, households, and government. The majority of the hazardous waste stream in the County consists of waste oil, paint, and lead acid car batteries. While hazardous waste is generated by a variety of land uses, small businesses and industry account for most of the hazardous waste generated in the County. Generators are classified based on the quantity of hazardous materials generated. Small businesses and government facilities may be classified as Small Quantity Generators (SQGs) or Conditionally Exempt Small Quantity Generators (CESQGs). Industries are typically classified as SQGs or Large Quantity Generators (LQGs; County 2003).

Hazardous Materials Transportation

Major access routes to and within El Dorado County include U.S. Highway 50 (U.S. 50) and State Routes (SRs) 49, 89, 153, and 193. U.S. 50, SR 49, and SR 89 are the designated highways for the transport of hazardous materials classified as explosives in the County. None of the highways in the County have been designated for the transport of inhalation hazard and radioactive hazardous materials. Highways have not been designated for other types of hazardous materials, such as compressed gases, flammable and combustible liquids, flammable solids, oxidizers, and corrosives, which may typically be transported on any state highway and other roadways within the County, subject to the limitations in the Hazardous Materials Transportation Act (County 2003).

Businesses classified as SQGs and LQGs are required to ship their hazardous waste via a hauler registered with the State of California to a licensed hazardous waste treatment, storage, and/or disposal facility. All solid waste collected by the private solid waste haulers must now be screened for hazardous waste at the material recovery facilities.

Both the USEPA and the U.S. DOT regulate the overall transportation of hazardous waste and material, including transport via highway and rail. USEPA administers permitting, tracking, reporting, and operations requirements established by the RCRA. The U.S. DOT regulates the transportation of hazardous materials through implementation of the Hazardous Materials Transportation Act. This Act administers container design and labeling and driver training requirements. These established regulations are intended to track and manage the safe interstate transportation of hazardous materials and waste. Transportation of hazardous materials on highways falls under federal legislation; however, authority is delegated to various state and local agencies that are focused on specific aspects of

hazardous materials and transportation. The Hazardous Waste Control Act establishes the California Department of Health Services (DHS) as the lead agency in charge of the implementation of the RCRA program. State and local agencies such as the CHP, Caltrans, and the County Fire Departments and protection districts are responsible for the enforcement of State and federal regulations and responding to hazardous materials transporting emergencies. The CHP establishes State and federal hazardous material truck routes and has lead responsibility over hazardous material spills on State highways.

Environmental Database Search

The SWRCB regulates spills, leaks, investigation, and cleanup sites and maintains an online database, GeoTracker, to provide access to environmental data. The GeoTracker database tracks regulatory data about leaking underground storage tank (LUST) sites, fuel pipelines, and public drinking water supplies and presents it in a geographic information system format. GeoTracker contains 496 records for El Dorado County. The database indicates that there are 204 LUST Cleanup Sites, 41 Cleanup Program Sites, eight Land Disposal Sites, 133 WDR sites, 13 AGLand Domestic Wells, 86 Permitted Underground Storage Tank (UST) Sites, three Single-Walled UST Sites, and two Non-Case Information Sites, most of which have been fully remediated. A total of 27 sites are currently open, including five LUST Cleanup Sites, 18 Cleanup Program Sites, and four Land Disposal Sites (SWRCB 2024).

DTSC also maintains a list of cleanup sites and hazardous waste permitted facilities on its EnviroStor database. The EnviroStor database has a total of 56 records for El Dorado County, none of which are active (DTSC 2024).

Wildfires

Wildland fire is a major hazard in the State of California, particularly in the foothill areas. Wildland fires have caused major resource damage in the County, requiring large investments in burn site rehabilitation. Wildland fires burn natural vegetation on developed and undeveloped lands and include timber, brush, woodland, and grass fires. While low-intensity wildland fires have a role in the County's ecosystem, wildland fires put human health and safety, structures (e.g., homes, schools, businesses, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk. According to the California Fire Hazard Severity Zone Viewer, the majority of lands within the El Dorado County SRA are classified as VHFHSZ (CAL FIRE 2024c).

The long, hot, dry summers in El Dorado County, combined with poor road access, inadequate clearance between structures and vegetation, flammable vegetation, and steep topography, result in severe wildfire conditions every year. Wildland fires may be started by natural processes, primarily lightning, or by human activities, both intentionally and accidentally. Where there is human access into wildland areas, the risk of fire increases. Human activities, such as smoking, debris burning, and equipment operation are the major causes of wildland fires. According to CAL FIRE, more than 90 percent of wildland fires within CAL FIRE's jurisdiction are started by people while less than 10 percent are started by lightning. Topography is a central factor when considering the fire hazard of an area. For example, as slopes increase, fires spread faster. In the steep and heavily vegetated ravines that are prevalent throughout the County, fire spreads rapidly and creates a "chimney effect," in which drafts of hot air and gases blow upward from ravines, resulting in sudden flashes of fire. Steep terrain also restricts accessibility to wildland fires by fire suppression crews and thus allows wildland fires to spread into additional areas (County 2003).

Most of the burned areas located on the west slope of El Dorado County have occurred on wildlands or in rural areas near wildlands. Wildland fires affect grass, forest, and brush lands, as well as any structures located within them. Where there is human access to wildland areas, such as the Sierra Nevada and foothills areas, the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Wildfires may occur in all areas of El Dorado County, including the most populated areas of El Dorado Hills, Cameron Park/Shingle Springs, Placerville, Camino/Pollock Pines and South Lake Tahoe. El Dorado National Forest also covers approximately 460,000 acres and is also vulnerable to wildfire (County 2024c).

Preventive measures are designed to minimize the occurrence of, and damage caused by wildland fires. As natural causes of wildland fires (primarily lightning) cannot be controlled, the emphasis is placed on prohibiting and minimizing human activities that directly cause wildland fires. Despite legal prohibitions, many wildland fires start unintentionally as a result of automobile traffic, equipment use, smoking, and outdoor recreation activities. In order to minimize the fire-causing potential of legal activities, federal, State, and local agencies have implemented a variety of measures, including education, signage, patrol, and enforcement (County 2003).

Fire Protection

Lands within El Dorado County include FRAs, SRAs, and LRAs. Fire protection services for LRA lands are provided by 12 local fire districts and one city fire department. Nine fire districts are located on the western slope of the County, and four are located in the Lake Tahoe Basin.

The western slope of the County receives fire protection services from nine local fire protection districts. The Lake Tahoe Basin receives services from four fire protection districts including the South Lake Tahoe Fire District. The fire protection districts that serve rural areas are primarily staffed by volunteer fire fighters. There are mutual aid agreements between most of the agencies to ensure that adequate manpower and equipment can be provided when a fire occurs. The local fire protection districts are responsible for structural fire and wildland fire. Response times for the local fire protection districts can be more than 20 minutes in rugged mountain areas.

The Amador-El Dorado Unit of CAL FIRE is responsible for providing fire protection services to 548,531 acres of SRA land in the County. According to the CAL FIRE Fire Hazard Severity Zone Map for El Dorado County, 419,622 acres are Very High; 109,327 acres are High; and 19,582 acres are Moderate (CAL FIRE 2024b). In fulfillment of the mutual aid agreement with the local fire districts and USFS, CAL FIRE also responds to and abates uncontrolled fire that threatens to destroy life, property, or natural resources outside the SRA. CAL FIRE operates five state-owned fire stations near the communities of Camino, El Dorado, Pilot Hill, Garden Valley, and River Pines.

USFS is responsible for fire prevention and suppression of FRA lands in the County, including the Eldorado National Forest and privately owned lands within the boundaries of the forest. USFS also provides mutual aid to CAL FIRE. USFS uses a variety of fire management techniques, including fuel loading management, fire hazard clearance from structures, and control of high-risk human activities (County 2003).

For further information on fire protection services in El Dorado County, see Section 4.15, *Public Services*, of this program EIR.

Evacuation Routes/Emergency Response Plans

Evacuation of an endangered area is a priority during an emergency or disaster. Each incident is unique and requires rapid evaluation by all involved agencies to determine the best evacuation route given the type of emergency. El Dorado County does not currently have a static emergency evacuation plan. However, in the event of a disaster or large-scale incident, the County OES coordinates the overall response through the EOC. In the event of an emergency, El Dorado County Sheriff's Office is the responsible entity for declaring and directing evacuations in the case of emergencies (County 2024b). When activated, the EOC provides a central location for responding and supporting agencies to collaborate response and recovery efforts, allowing for effective and efficient information dissemination and resource deployment.

The County's OES, which is managed by the County Sheriff's Office, collaborates with the County's fire districts, emergency medical services agency, hospitals, schools, and public and private agencies to prepare, update, and implement the County's EOP, which includes emergency response plans for flood and dam failure events. The County's OES also maintains emergency plans for dams that are prepared by utility companies (County 2003).

The City of South Lake Tahoe is responsible for emergency operations within the City's limits. In accordance with the California Office of Emergency Service's SEMS program, the City of South Lake Tahoe prepared an Emergency Management Plan in 2008 that is in compliance with OES standards (City of South Lake Tahoe 2010).

Airports

El Dorado County has four airports, Cameron Airpark, Georgetown Airport, Placerville Airport, and Lake Tahoe Airport, each governed by an ALUCP. Each ALUCP identifies the decibel-level contours that would affect surrounding land uses during airport operation and designates safety zones in which land uses are restricted to prevent interference with airport operations and ensure the safety of surrounding land uses. Although standards established by the FAA form the basis of the safety and noise restrictions, the County's ALUCs (EDCTC and South Lake Tahoe) are responsible for adopting and tailoring these standards to the specific airport and for enforcing them.

Land uses prohibited in the safety zones of Cameron Airpark, Georgetown Airport, and Placerville Airport, as regulated by the EDCTC ALUCP, are summarized in Table 4.9-1.

Table 4.9-1
EL DORADO COUNTY TRANSPORTATION COMMISSION AIRPORT SAFETY ZONES

Zone	Safety Zone Location	Prohibited Land Uses
1	Runway Protection Zone	<ul style="list-style-type: none"> All land uses and structures except ones required by aeronautical function, and except for the following conditionally compatible uses: natural land areas, water, and agriculture (except residences and livestock)

Zone	Safety Zone Location	Prohibited Land Uses
2	Inner Approach/Departure Zone	<ul style="list-style-type: none"> Outdoor major assembly facilities, group recreation, local parks, camping, eating/drinking establishments Multi-family residential, long-term and short-term lodging, congregate care, all educational and institutional uses, research and development Major and local retail, vehicle fueling, hazardous materials production and heavy industrial, communications facilities Power plants
3	Inner Turning Zone	<ul style="list-style-type: none"> Outdoor major assembly facilities, local parks Multi-family residential, long-term lodging Indoor major assembly facilities, penal institutions, hazardous materials production Power plants
4	Outer Approach/Departure Zone	<ul style="list-style-type: none"> Same as Safety Zone 3
5	Sideline Zone	<ul style="list-style-type: none"> Outdoor major assembly facilities, group recreation, small/non-group recreation, local parks, camping All residential and lodging uses All educational and institutional uses, except for the following conditionally compatible uses: public safety facilities Major and local retail Hazardous materials production, heavy and light industrial Research and development Power plants, solid waste disposal facilities, solid waste transfer facilities
6	Traffic Pattern Zone	<ul style="list-style-type: none"> None

Source: EDCTC 2012

Land uses prohibited in the safety zones of the Lake Tahoe Airport, as regulated by the South Lake Tahoe ALUCP, are summarized in Table 4.9-2.

Table 4.9-2
SOUTH LAKE TAHOE AIRPORT LAND USE COMMISSION
AIRPORT SAFETY ZONES

Zone	Safety Zone Location	Prohibited Land Uses
1	Runway Protection Zone	<ul style="list-style-type: none"> All land uses and structures except ones required by aeronautical function, and except for the following conditionally compatible uses: range pasture management and improvement, grazing, open space, prescribed fire/burning management, sensitive plants management, insect and disease suppression, uncommon plant community management, and all watershed improvements

Zone	Safety Zone Location	Prohibited Land Uses
2	Inner Approach/Departure Zone	<ul style="list-style-type: none"> • Nursing and personal care, residential care • Bed and breakfast accommodations, time sharing, hotel, motel, and other transient units • Service stations • Privately owned assembly and entertainment • Auto repair and service, sales lots, business and vocational schools, fuel and ice dealers • Airfields, landing strips, and heliports (new non-emergency sites), power generating • Regional public health and safety facilities, colleges, social service organizations, local assembly and entertainment, public utility centers, day care centers/preschools, hospitals, public owned assembly and entertainment, kindergarten through secondary schools
3	Inner Turning Zone	<ul style="list-style-type: none"> • Same as Safety Zone 2, except for the following conditionally compatible uses: regional public health and safety facilities, colleges, social service organizations, local assembly and entertainment
4	Outer Approach/Departure Zone	<ul style="list-style-type: none"> • Nursing and personal care, residential care • Bed and breakfast accommodations, time sharing, hotel, motel, and other transient units • Privately owned assembly and entertainment • Business and vocational schools, fuel and ice dealers • Airfields, landing strips, and heliports (new non-emergency sites), power generating • Regional public health and safety facilities, colleges, public utility centers, day care centers/preschools, hospitals, public owned assembly and entertainment, kindergarten through secondary schools
5	Sideline Zone	<ul style="list-style-type: none"> • All residential land uses • All tourist accommodations • All commercial land uses • Airfields, landing strips, and heliports (new non-emergency sites), power generating • Regional and local public health and safety facilities, religious assembly, colleges, social service organizations, local assembly and entertainment, public utility centers, day care centers/preschools, hospitals, public owned assembly and entertainment, collection stations, kindergarten through secondary schools • All recreation facilities
6	Traffic Pattern Zone	<ul style="list-style-type: none"> • None

Source: South Lake Tahoe 2019

Other Sites of Potential Concern

Lead-Based Paint and Aerially Deposited Lead

Prior to the enactment of federal regulations limiting their use in the late 1970s, lead-based paint (LBP) was often used in residential construction. Lead is a highly toxic metal that was used for many years in products found in and around homes. Lead may cause a range of health effects, from behavioral

problems and learning disabilities to seizures and death. The primary source of lead exposure in residences is deteriorating LBP. Lead dust can form when LBP is dry scraped, dry sanded, or heated. Dust also forms when painted surfaces bump or rub together. LBP that is in good condition is usually not a hazard. Regulations for LBP are contained in the Lead-Based Paint Elimination Final Rule 24 CFR 33, governed by the U.S. Department of Housing and Urban Development, requires sellers and lessors to disclose known LBP and LBP hazards to perspective purchasers and lessees. Additionally, all LBP abatement activities must comply with Cal/OSHA, federal OSHA, and DHS requirements. Only LBP trained and certified abatement personnel are allowed to perform abatement activities. All LBP removed from structures must be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the lead contaminated material must be taken to a landfill or receiving facility licensed to accept the waste.

In addition to lead associated with household uses, it is likely that aurally deposited lead (ADL) is present along some of the older major roadways in the County. ADL is known to exist along the California State Highway System. Until the 1990s, lead-based additives in gasoline were expelled from engine exhausts onto adjacent road shoulders and medians. Consequently, lead was aurally deposited as a particulate in vehicle exhaust. This is a concern along U.S. 50 and SR 89 where there are substantial amounts of traffic. ADL is typically found within the top 0.6 meter of material in unpaved areas along heavily traveled roadway rights-of-way (ROW; City of South Lake Tahoe 2010).

Asbestos

Asbestos dust is a known carcinogen and is classified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB). Naturally occurring asbestos (NOA) most commonly occurs in ultramafic rock (i.e., igneous and metamorphic rock with low silica content) that has undergone partial or complete alteration to serpentine rock (or serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, is associated with ultramafic rock, particularly near geological faults. Some areas of the County are known to contain NOA. See Figure 4.3-1 for a map of the known areas of NOA, areas likely to contain NOA, and buffer zones for known and likely NOA areas.

4.9.2 Significance Thresholds

Based on Appendix G of the CEQA Guidelines, a hazards and hazardous materials impact is considered significant if implementation of the proposed Project would:

1. Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials;
2. 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;
3. Emit hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
4. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 of the California Government Code and, as a result, would create a significant hazard to the public or the environment;

5. 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 or excessive noise for people residing or working in the project area;
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.9.3 Impact Analysis

HAZ-1 The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The proposed Project would not require long-transport, use, or disposal of hazardous materials; however, small quantities of hazardous materials may be stored, used, and handled during construction activities as part of the installation of fiber optic lines. Construction activities would mainly involve the use of hazardous materials such as fuels, lubricants, and solvents typically associated with construction equipment and vehicles. These materials are commonly used during construction and are not acutely hazardous. Operation of either underground or aboveground fiber optic conduit would not require long-transport, use, or disposal of hazardous materials; however, small quantities of hazardous materials may be used or handled during routine maintenance checks.

Project applicants, builders, and contractors for individual fiber projects would be required to use, store, and transport hazardous materials in accordance with local, State, and federal regulations, including Cal/OSHA and DTSC requirements and manufacturer's instructions, during construction and operation of individual fiber projects. Transportation of hazardous materials on roadways is also regulated by the CHP and Caltrans. Title 49 of the CFR, *Hazardous Materials Regulations*, includes requirements for the classification of materials, packaging, hazard communication, transportation, handling, hazardous materials employee training, and incident reporting.

The California Department of Public Health regulates the haulers of hazardous waste. A valid registration issued by DTSC is required, unless specifically exempted, to transport hazardous wastes, and the California Department of Motor Vehicles (DMV) requires all hazardous materials transporters to possess a commercial driver's license with a hazardous materials endorsement. Vehicle Code Section 31303 outlines general routing and parking restrictions for hazardous material and hazardous waste shipments, and the CHP publishes a list of restricted or prohibited highways. The Federal Motor Carrier Safety Administration also maintains a Hazmat Route Registry that describes the highway routes that must be utilized for the transport of certain classes of hazardous waste that is monitored and regulated by the administration's field office and the CHP.

As individual fiber projects would be required to implement and comply with local, State, and federal regulations regarding hazardous materials, the Project would not create significant hazards to the public

or environment through the routine transport, use, and disposal of hazardous materials. The impact would be less than significant.

Significance without Mitigation: Less than significant.

HAZ-2 The proposed project may 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.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The majority of broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements.

Documented or Undocumented Hazardous Materials Site

Although the exact locations of fiber optic lines that would be constructed under individual fiber projects along roadways are not known at this time, installation and maintenance activities have the potential to occur within the boundaries of a known hazardous waste site or in areas with existing soil or groundwater contamination. Proposed fiber optic lines could be constructed in areas that have existing buried utilities that could contain hazardous waste. Fiber installation projects would also involve ground disturbance in the upper layers of soil along existing roadways. Disturbance of sites with known or previously unknown hazardous material contamination could cause various short-term or long-term adverse health effects in persons exposed to hazardous substances. If it is determined that an individual fiber project may be located near or on a hazardous materials site, a Phase I Environmental Site Assessment (ESA) would be required to be prepared to evaluate and address potential exposure.

If an unidentified underground storage tank were to be uncovered or disturbed during construction activities, it would be sealed and abandoned in place or removed, per federal, State, and local regulations. The extent to which groundwater may be affected depends on the type of contaminant, the amount released, and depth to groundwater at the time of the release. If groundwater contamination is identified, remediation activities would be required by the CVRWQCB and/or LRWQCB.

Radiofrequency Energy

Utility structures, such as a telecommunications utility pole have the potential to emit radiofrequency (RF) energy, a type of electromagnetic energy. According to the Federal Communications Commission (FCC) Office of Engineering & Technology, levels of RF energy routinely encountered by the general public are typically far below levels necessary to produce significant heating and increased body temperature (FCC 2024). There have been no conclusive studies that have examined the possibility of a link between RF exposure and cancer, and other studies have failed to find evidence for a causal link to cancer or any related conditions (FCC 2024). As no conclusive or causal evidence of biological effects from RF energy has been determined, there is no evidence to suggest the proposed telecommunications utility poles would cause health problems to the surrounding communities. Due to lack of evidence, the impact regarding RF energy would be less than significant.

Asbestos

As noted in Section 4.9.1, *Environmental Setting*, some areas of the County area are known to contain NOA. As outlined in EDCAQMD 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 disturbed, then the Air Pollution Control Officer may provide an exemption from this Rule. If a geological evaluation has not been conducted, then an owner/operator would submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity. Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer.

Aerially Deposited Lead

It is likely that ADL is present along some of the older major roadways in the County. ADL is known to exist along the California State Highway System. ADL is typically found within the top 0.6 meter of material in unpaved areas along heavily traveled roadway ROW (City of South Lake Tahoe 2010). All individual fiber projects would be required to implement and comply with federal, State, and local regulatory requirements to reduce the potential for exposure to the public or environment to hazards.

Spillage

Spills during on-site fueling of equipment during construction or an upset condition could result in a release of fuel or oils into the environment, including sensitive waterways within the vicinity of the proposed activity. Procedures regarding spill prevention and response, as well as proper handling and disposal of hazardous materials are established by federal, State, and local regulations and would be required to be implemented as part of individual fiber projects.

Impact Conclusion

Due to the limited area of ground disturbance and short exposure window, the potential for construction activities to encounter hazardous conditions that could affect workers' health, or the environment would be limited. However, as the location of individual fiber projects relative to hazardous materials sites is not yet known, there would be some potential for exposure of construction workers and the public to hazardous materials contamination during construction. If it is determined that an individual fiber project may be located near or on a hazardous materials site, a Phase I ESA would be required to be prepared. Additionally, if an individual fiber project would be located within an area of the County known to contain NOA and a geological evaluation has not been conducted, then an owner/operator would submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity. Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer.

Therefore, impacts to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant with implementation of Mitigation Measure AQ-2.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure AQ-2: Prepare an Asbestos Dust Mitigation Plan

If Naturally Occurring Asbestos (NOA), serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer, then an Asbestos Dust Mitigation Plan shall be prepared and submitted to the Air Pollution Control Officer prior to construction. The Asbestos Dust Mitigation Plan shall be prepared in compliance with El Dorado County Air Quality Management District (EDCAQMD) Rule 223-2. Construction activities shall not commence until the Air Pollution Control Officer has approved or conditionally approved the Asbestos Dust Mitigation Plan. 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 disturbed, then the Air Pollution Control Officer shall provide an exemption from EDCAQMD Rule 223-2.

Significance with Mitigation: Less than significant impact.

HAZ-3 The proposed project may emit hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

As discussed in Section 4.15, *Public Services*, El Dorado County includes 15 school districts and 67 schools, as well as two higher learning institutions. Multiple elementary, middle, high schools, and higher learning institutions in the County are located near roadways. Although the exact locations of the individual fiber projects are not known at this time, some of these schools may be located within one-quarter mile of proposed fiber optic line installation activities. As noted under Impacts HAZ-1, HAZ-2, and HAZ-4, the proposed Project would be required to comply with existing federal, State, and local regulations regarding transport, use, disposal, and reasonably foreseeable upset and accident conditions of hazardous materials. However, because the location of individual fiber projects relative to hazardous materials sites is unknown and may be located within one-quarter mile of a school, there would be some potential for exposure of construction workers and the public to hazardous materials contamination during construction.

If it is determined that an individual fiber project may be located near or on a hazardous materials site, a Phase I ESA would be required to be prepared to evaluate and address potential exposure. Additionally, if an individual fiber project would be located within an area of the County known to contain NOA and a geological evaluation has not been conducted, then an owner/operator would be required to submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity. Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer.

Therefore, the impact would be less than significant with implementation of Mitigation Measure AQ-2.

Significance without Mitigation: Potentially significant impact.

See Impact HAZ-2 for Mitigation Measure AQ-2.

Significance with Mitigation: Less than significant impact.

HAZ-4 The proposed project may be located on a site that is included on a list of hazardous materials compiled pursuant to Section 65962.5 of the California Government Code and, as a result, would not create a significant hazard to the public or the environment.

As mentioned in Section 4.9.1.3, *Existing Conditions*, SWRCB's GeoTracker contains 496 records for El Dorado County. The database indicates there are 204 LUST Cleanup Sites, 41 Cleanup Program Sites, eight Land Disposal Sites, 133 WDR sites, 13 AGLand Domestic Wells, 86 Permitted UST Sites, three Single-Walled UST Sites, and two Non-Case Information Sites, most of which have been fully remediated. A total of 27 sites are currently open, including five LUST Cleanup Sites, 18 Cleanup Program Sites, and four Land Disposal Sites. DTSC also maintains a list of cleanup sites and hazardous waste permitted facilities on its EnviroStor database. The EnviroStor database has a total of 56 records for El Dorado County, none of which are active. Although the exact locations of the individual fiber projects are not known at this time, any development of individual fiber projects would be required to address contamination to prevent the release of hazardous materials in compliance with existing regulations and under the oversight of the applicable regulatory body.

If it is determined that an individual fiber project may be located near or on a hazardous materials site, a Phase I ESA would be required to be prepared to evaluate and address potential exposure. Additionally, if an individual fiber project would be located within an area of the County known to contain NOA and a geological evaluation has not been conducted, then an owner/operator would be required to submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity. Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer. Therefore, the impact would be less than significant with implementation of Mitigation Measure AQ-2.

Significance without Mitigation: Potentially significant impact.

See Impact HAZ-2 for Mitigation Measure AQ-2.

Significance with Mitigation: Less than significant impact.

HAZ-5 The proposed project may be 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, however, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area.

El Dorado County has four airports: Cameron Airpark, Georgetown Airport, Placerville Airport, and Lake Tahoe Airport. The EDCTC is the designated ALUC for the three airports within the west slope of the County, Cameron Airpark, Georgetown Airport, and Placerville Airport, and maintains an individual ALUCP for each airport. The South Lake Tahoe ALUC is the designated ALUC for the Lake Tahoe Airport and maintains the Lake Tahoe ALUCP. The FAA requires runway protection zones and height limits on structures near airports to reduce risks to the public. In addition, the EDCTC and South Lake Tahoe ALUCPs designate Safety Zones for the areas surrounding the two airports and promote compatibility between the airports in El Dorado County and the land uses that surround them. Land uses prohibited by the ALUCP Safety Zones for each ALUC are described in Table 4.9-1 and Table 4.9-2.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The majority of broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Although the exact locations of fiber optic lines that would be constructed under individual fiber projects along roadways are not known at this time, it is likely that fiber optic lines may be installed along roadways within two miles of an airport.

The maximum height of an overhead utility pole would be 100 feet. The EDCTC and South Lake Tahoe ALUCPs would restrict the construction of aboveground utility lines and poles in areas where these structures could interfere with airport operations and safety. Additionally, the aboveground structures would not be tall enough to interfere with airport operations or require filing notice with the FAA in accordance with FAR Part 77 (i.e., it would not exceed 200 feet in height).

Additionally, the proposed Project would not include permanent structures for human occupancy and would therefore not create the potential to expose residents to airport-related noise. As discussed in Section 4.13, *Noise*, the proposed Project would not locate any new noise sensitive land uses (NSLUs) near any airport in the County. Construction and operation of individual fiber projects may require workers to be present near an airport for installation and maintenance activities; however, workers would only be within a given area for brief periods of time. Compliance with the EDCTC and South Lake Tahoe ALUCPs would substantially limit the potential for exposure of people to aircraft-related hazards. Therefore, the Project would not pose a safety hazard or excessive noise with regard to airport operations. The impact would be less than significant.

Significance without Mitigation: Less than significant impact.

HAZ-6 The proposed project may impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Information on evacuation routes and emergency response plans in the County is contained in the County MJHMP and City of South Lake Tahoe LHMP. Additionally, the County EOP provides information on emergency procedures, including preparedness, response, mitigation, and recovery. As previously noted, the City of Placerville does not have an adopted LHMP, and instead has an annex that supplements the County MJHMP. In the event of an emergency, the El Dorado County Sheriff's Office is the responsible entity for declaring and directing evacuations in the case of emergencies. The County OES provides emergency alerts through the El Dorado County Emergency Alerts powered by Rave. The County OES recently implemented Perimeter Platform to improve emergency operations and communication channels with the public during critical situations. Although the Perimeter Platform is not an alerting platform, it provides vital information for residents during crises, particularly wildfires (County 2024b).

Construction

Construction of individual fiber projects may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services. Coordination with local agencies (e.g., CHP, Caltrans, and local police and fire departments) for any necessary and temporary road closures would be required, especially for construction within designated emergency access routes or in areas that would impede or otherwise affect evacuation and emergency access or services. As discussed in Section 4.17, *Transportation*, to minimize or avoid lane closures that could interfere with traffic

circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project would be required to develop and implement a Traffic Control and Detour Plan as outlined in Mitigation Measure TRA-1 below. Depending on the location of individual fiber projects, an Encroachment Permit application would be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3 for review and approval. Any construction on Bureau of Land Management (BLM) land would require the ROW acquisition, and any construction on U.S. Forest Service (USFS) land would require a construction easement. Any construction on private land would require applicable building permits. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required for all construction activities along ROW, and would be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits. With implementation of TRA-1, which requires preparation of a Traffic Control and Detour Plan, potentially significant impacts related to an adopted emergency response or emergency evacuation plan from construction of individual fiber projects along ROW would be reduced to less than significant.

Operation

Operational activities for any individual fiber projects implemented under the Project would be limited to routine maintenance and emergencies. Infrastructure such as circuit cabinets with cooling fans and/or stand-by generators associated with individual fiber projects may be routinely checked, as needed.

Impact Conclusion

Implementation of the proposed Project would introduce a wider and more reliable network throughout the County. The proposed Project would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. The Project may also increase individuals' access to telehealth throughout the County, which could reduce the need for medical emergency response vehicles and demand for emergency response services. Therefore, with implementation of TRA-1, which requires preparation of a Traffic Control and Detour Plan, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan, and the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure TRA-1: Traffic Control and Detour Plan

Prior to the issuance of an encroachment permit, a Traffic Control and Detour Plan shall be developed for individual fiber projects that would require an encroachment permit for construction activities along ROW to manage traffic during construction. The applicant shall consult with the Lead Agency and/or Caltrans prior to initiation of construction activities that may affect area traffic (such as construction staging necessitating lane closure, trenching, etc.) to ensure that the Traffic Control and Detour Plan is prepared in conformance with applicable code and ordinance requirements for emergency access. The construction contractor shall implement appropriate traffic controls identified in the Traffic Control and Detour Plan in accordance with the California Vehicle Code and other State and local requirements to avoid or minimize impacts on traffic during construction. The Traffic Control and Detour Plan shall be submitted to the agency responsible for issuing the encroachment permit for review and approval prior to the commencement of construction activities.

Significance with Mitigation: Less than significant impact.

HAZ-7 The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Most of the burned areas located on the western slope of El Dorado County have occurred on wildlands or in rural areas near wildlands. Wildland fires affect grass, forest, and brush lands, as well as any structures located within them. Where there is human access to wildland areas, such as the Sierra Nevada and foothills areas, the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Wildfires may occur in all areas of El Dorado County, including the most populated areas of El Dorado Hills, Cameron Park/Shingle Springs, Placerville, Camino/Pollock Pines and South Lake Tahoe. Eldorado National Forest also covers approximately 460,000 acres and is also vulnerable to wildfire (County 2024c).

Given the combinations of fuels, weather, and topography, as well as the past fire history of El Dorado County, the County MJHMP indicates that the probability of significant wildfire occurring in the future is highly likely (County 2024c). Due to its high fuel load and long, dry summers, most of El Dorado County continues to be at risk from wildfire. As a result, from May to October of each year, the County faces a serious wildland fire threat. Based on recent trends, fires will continue to occur on a near annual basis in the County, and the threat of wildfire and potential losses are constantly increasing as human development and population increase and the WUI areas expand (County 2024c). For further evaluation of wildfire risks and response, see Section 4.20, *Wildfire*, of this program EIR.

Construction

Construction activities that could result in sparks, such as welding or grinding, have a greater likelihood of creating a source of ignition than other construction-related activities. Numerous ordinances are implemented by the TRPA, the County, and the incorporated cities of Placerville and South Lake Tahoe to decrease the wildfire hazards in El Dorado County. Additionally, adherence to the CBC Chapter 7A, *Fire Hazard Severity Zones and Building Standards and Materials*, and Public Resource Code 4291, requires property owners to maintain clearance of flammable vegetation of 100 feet from structures in order to reduce the risk of fire. The County MJHMP and City of South Lake LHMP also identify critical facilities and infrastructure that include emergency operations centers and evacuation shelters. These critical facilities would provide emergency support to residents during potential wildfire events. Additionally, construction workers would be trained in basic firefighting, and the availability of tools and training would allow construction crews to help control or extinguish fires they may come upon. Therefore, adherence to existing regulations would ensure that impacts related to fire risks from construction would be less than significant.

Operation

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Buried conduits would not exacerbate fire risk as all infrastructure would be located underground. Overhead fiber optic lines would be attached to proposed or existing pole lines. The proposed poles would adhere to CBC Chapter 7A, *Fire Hazard Severity Zones and Building Standards and Materials*, and Public Resource Code 4291, which require property owners to maintain clearance of

flammable vegetation of 100 feet from structures in order to reduce the risk of fire. However, fiber optic lines do not carry an electrical charge and are therefore not a source of heat (Fluke Networks 2022). Therefore, underground, or aboveground fiber optic lines would not exacerbate fire risk. Impacts related to fire risks from operation would be less than significant.

Significance without Mitigation: Less than significant impact.

4.9.4 Cumulative Impacts

HAZ-8 The proposed project may contribute to a significant cumulative impact with respect to hazards and hazardous substances.

Cumulative impacts related to hazards and hazardous materials would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly create a significant hazard through the transport, use, or disposal of hazardous materials; accidental release of hazardous materials; release of hazardous emissions in proximity to a school; be located on a hazardous materials site; result in a safety hazard or excessive noise in proximity to an airport; or impair implementation of or physically interfere with an adopted emergency plan. As discussed above under Impact HAZ-1 through HAZ-7, implementation of the proposed Project would result in a less than significant impact related to hazards and hazardous materials with implementation of Mitigation Measures AQ-2 and TRA-1.

Numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. The transportation projects included in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis, could involve the storage, use, disposal, and transport of hazardous materials to some degree during construction. None of the cumulative projects are associated with the production and manufacturing of hazardous materials other than incidental hazardous materials as a by-product of the site activity. All listed transportation projects, including the proposed Project, would not create a cumulatively considerable hazard to the public or environment related to the handling or accidental release of hazardous materials. Implementation of the proposed Project would allow for individual fiber projects in areas that are prone to wildland fires. Where cumulative projects are constructed in close proximity, the potential for wildfire as a result of these projects may be increased. However, cumulative projects located in proximity to the proposed Project would also follow the County MJHMP and City of South Lake LHMP and adhere to CBC requirements, which would lessen the potential for wildfires.

If it is determined that an individual fiber project may be located near or on a hazardous materials site, a Phase I ESA would be required to be prepared to evaluate and address potential exposure. Additionally, if an individual fiber project would be located within an area of the County known to contain NOA and a geological evaluation has not been conducted, then an owner/operator would be required to submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity. Mitigation Measure AQ-2 would require the preparation of an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the individual fiber project applicant, a professional geologist, or the Air Pollution Control Officer. Implementation of Mitigation Measures AQ-2 would ensure that potential impacts from NOA released during construction of the Project would be less than cumulatively considerable.

To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required to be employed for all construction activities along ROW, and would be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits. With implementation of TRA-1, which requires preparation of a Traffic Control and Detour Plan, potentially significant impacts related to an adopted emergency response or emergency evacuation plan from construction of individual fiber projects along ROW would be less than cumulatively considerable.

Significance without Mitigation: Potentially significant impact.

See Impact HAZ-2 for Mitigation Measure AQ-2.

See Impact HAZ-6 for Mitigation Measure TRA-1.

Significance with Mitigation: Less than significant impact.

4.9.5 References

California Department of Forestry and Fire Protection (CAL FIRE). 2024a. CAL FIRE Strategic Plan 2024. Accessed September 4. Available at: <https://www.fire.ca.gov/about/cal-fire-strategic-plan-2024>.

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4.10 HYDROLOGY AND WATER QUALITY

This section describes the regulatory framework and existing conditions related to hydrology and water quality and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on hydrology and water quality were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance.

On September 30, 2024, the Central Valley Regional Water Quality Control Board (CVRWQCB) sent a letter to El Dorado County Economic Development Department to provide comments on the El Dorado County Broadband Fiber Project Environmental Impact Report (EIR). CVRWQCB noted that the environmental review document should evaluate potential impacts to both surface and groundwater quality. CVRWQCB also included permitting requirements for the Construction Storm Water General Permit, Clean Water Act (CWA) Section 404 Permit, CWA Section 401 Permit – Water Quality Certification, Waste Discharge Requirements – Dischargers to Waters of the State, Dewatering Permit, and National Pollutant Discharge Elimination System (NPDES) Permit. The Notice of Preparation (NOP) public comments letters are included in Appendix C.

4.10.1 Environmental Setting

4.10.1.1 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for hydrology and water quality. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Federal Water Pollution Control Act (Clean Water Act)

The following are potentially applicable sections of the Federal Water Pollution Control Act, also known as the Clean Water Act (33 USC 1251-13176).

Sections 303 and 305 - Total Maximum Daily Load Program

The State of California has adopted water quality standards to protect beneficial uses of State waters as required by the CWA 303 Total Maximum Daily Load (TMDL) Program and the State's Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act). CWA 303(d) established the TMDL process to guide the application of State water quality standards (see the discussion of State water quality standards below). To identify candidate water bodies for TMDL analysis, a list of water quality-limited streams is generated. Such streams are considered to be impaired by the presence of pollutants, including sediments, and to have no additional capacity for these pollutants.

In addition to the impaired water body list required by CWA Section 303(d), CWA Section 305(b) requires states to develop a report that assesses statewide surface water quality. Both CWA requirements are addressed through the development of a 303(d)/305(b) Integrated Report, which provides both an update to the 303(d) list and a 305(b) assessment of statewide water quality. The California State Water Resources Control Board (SWRCB) statewide 2014/2016 California Integrated

Report was based on Integrated Reports from each of the nine Regional Water Quality Control Boards (RWQCB). After approval of the Section 303(d) list portion of the California Integrated Report by the SWRCB, the complete 2014 and 2016 California Integrated Report was approved by the U.S. Environmental Protection Agency (USEPA) on April 6, 2018.

Section 401 - Water Quality Certification

CWA Section 401 requires that an applicant obtain a water quality certification (or waiver) for pursuing a federal permit to conduct any activity that may result in a discharge of a pollutant to a regulated water body. Water quality certifications are issued by the RWQCB in California. The Central Valley RWQCB (CVRWQCB) is responsible for issuing certifications in the western slope of El Dorado County (County), and the Lahontan RWQCB (LRWQCB) is responsible for issuing certifications in the eastern portion of the County and the City of South Lake Tahoe. Under the CWA, the State (as implemented by the relevant RWQCB) must issue or waive a CWA Section 401 water quality certification for a project to be permitted under CWA Section 404. Water quality certification requires the evaluation of water quality considerations associated with dredging or the placement of fill materials into waters of the United States. Construction of individual fiber projects under implementation of the proposed Project would require a CWA 401 certification if CWA Section 404 requirements are triggered.

Section 402 - National Pollutant Discharge Elimination System Program

The 1972 amendments to the Federal Water Pollution Control Act established the National Pollutant Discharge Elimination System Program permit program to control discharges of pollutants from point sources (CWA Section 402). The 1987 amendments to the CWA created a new section of the CWA that is devoted to stormwater permitting (CWA 402[p]). USEPA has granted the State of California primacy in administering and enforcing the provisions of CWA and the NPDES permit program. The NPDES permit program is the primary federal program that regulates point-source and nonpoint-source discharges to waters of the United States.

The SWRCB issues both general and individual permits for certain activities. Although implemented at the State and local level, relevant general and individual NPDES permits are discussed below.

Construction Activities

Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to file a notice of intent to obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ) (Construction General Permit). Construction activities subject to this permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which must be completed before construction begins. The SWPPP should contain a site map that shows the construction site perimeter; existing and proposed buildings, lots, roadways, and stormwater collection and discharge points; general topography both before and after construction; and drainage patterns across the project site. The SWPPP must list the Best Management Practice (BMP) that the discharger will use to manage stormwater runoff and describe the

placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a monitoring program for pollutants that are not visible to be implemented if there is a failure of BMP, and a pH and turbidity monitoring program if the site discharges to a water body listed on the CWA 303(d) list for sediment. The Construction General Permit describes the elements that must be contained in a SWPPP.

Section 404 - Permits for Fill Placement in Waters and Wetlands

CWA Section 404 regulates the discharge of dredged and fill materials into waters of the United States, which include oceans, bays, rivers, streams, lakes, ponds, and wetlands. Project proponents must obtain a permit from the U.S. Army Corps of Engineers (USACE) for all discharges of dredged or fill material into waters of the United States before proceeding with a proposed activity. Before any actions are implemented that may affect surface waters, a delineation of jurisdictional waters of the United States must be completed, following USACE protocols, to determine whether the study area contains wetlands or other waters of the United States that qualify for CWA protection. These areas include the following:

- Sections within the ordinary high-water mark of a stream, including non-perennial streams with a defined bed and bank and any stream channel that conveys natural runoff, even if it has been realigned.
- Seasonal and perennial wetlands, including coastal wetlands.

CWA Section 404 permits may be issued for only the least environmentally damaging practical alternative (i.e., authorization of a proposed discharge is prohibited if there is a practical alternative that would have fewer significant effects and lacks other significant consequences). CWA Section 404 would apply if project construction was proposed within waters of the United States.

State Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, CWA Section 401 water quality certifications, or other approvals.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) was signed into California in 2014. SGMA establishes a framework for long-term sustainable groundwater management across California and requires local agencies to bring over drafted basins into balanced levels of pumping and recharge. The California Department of Water Resources (DWR) uses the California Statewide Groundwater Elevation Model Priority List to rank groundwater basins across the State according to priority levels of high, medium, low, or very low, and SGMA specifies deadlines for completion of Groundwater Sustainability

Plans (GSPs) or Alternatives to GSPs in order of basin priority. Under SGMA, high- and medium-priority basins, as designated by the DWR, must establish Groundwater Sustainability Agencies (GSA) that oversee the preparation and implementation of a local GSP (DWR 2024a).

According to the SGMA 2019 Basin Prioritization, there were 94 basins and/or subbasins identified as medium or high priority in the State of California, and 21 of the basins were identified as Critically Overdrafted. The Tahoe South Groundwater Subbasin (DWR Groundwater Basin NO. 6-5.01) is a sedimentary groundwater basin within the southern portion of the larger Tahoe Valley Groundwater Basin. In 2019, the subbasin was determined to be of medium priority (DWR 2024a). As such, in 2022, the South Tahoe Public Utility District (STPUD) completed the Alternative Plan for Tahoe Valley South Subbasin, which was approved by DWR (DWR 2024a; DWR 2024b).

Regional Regulations

Regional Water Quality Control Boards and Basin Plans

The Porter-Cologne Water Quality Act established the State Water Resources Control Board and divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Basin. The CVRWQCB regulates water quality in the western slope of El Dorado County and the LRWQCB regulates water quality in the eastern portion of the County and the City of South Lake Tahoe. The CVRWQCB and LRWQCB are responsible for establishing water quality standards in the County and have the authority to require groundwater investigations when the quality of groundwater or surface waters of the State is threatened and to require remediation actions, if necessary.

Water quality in streams and aquifers of the region is guided and regulated by the respective RWQCB basin plans. State policy for water quality control is directed at achieving the highest water quality consistent with the maximum benefit to the people of the State. The preparation and adoption of water quality control plans (Basin Plans) is required by the California Water Code (Section 13240) and supported by the CWA. Section 303 of the CWA requires states to adopt water quality standards, which consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. The following Water Quality Control Plans (Basin Plans) apply to the proposed Project:

Basin Plan for the Sacramento and San Joaquin River Basins

The CVRWQCB implements water quality protection measures by formulating and adopting water quality control plans, also called basin plans, for specific groundwater and surface water basins, and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges in the western slope of the County. The Basin Plan for the Sacramento River and San Joaquin River Basins provides water quality objectives and standards for waters of the Sacramento River and San Joaquin River Basins. This Basin Plan contains specific numeric water quality objectives for bacteria, dissolved oxygen, pH, pesticides, electrical conductivity, temperature, turbidity, and trace elements, as well as numerous narrative water quality objectives, that are applicable to certain water bodies or portions of water bodies. It also includes objectives for groundwater quality that pertain to bacteria, chemical constituents, radioactivity, taste and odors, and toxicity. With regard to El Dorado County, certain water quality objectives apply to specific waters within the County while only general objectives apply to other surface waters and their tributaries in the County (County 2003).

Basin Plan for the Lahontan Region North and South Basins

The Basin Plan for the Lahontan Region North and South Basins serves as the basis for the LRWQCB's regulatory program. All discharges to surface water or groundwater within the LRWQCB's jurisdiction, including the eastern portion of the County and the City of South Lake Tahoe, are subject to Basin Plan requirements. The Basin Plan is implemented through Lahontan Order Number R6T-2003-0032, adopted in 2003, in replacement of Board Order 6-91-36, passed in 1991. The Basin Plan sets forth water quality standards for the surface and ground waters of the region, which include both designated beneficial uses of water and the narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan identifies general types of water quality problems that can threaten beneficial uses in the region and describes required or recommended control measures for these problems. In some cases, the Basin Plan prohibits certain types of discharges in particular areas. The Basin Plan establishes water quality objectives and implementation programs to meet objectives and to protect the beneficial uses of water in the Lake Tahoe Basin (City of South Lake Tahoe 2010).

California-Nevada Interstate Compact Concerning Water of Lake Tahoe, Truckee River, Carson River, and Walker River Basins

The California-Nevada Interstate Compact Concerning Water of Lake Tahoe, Truckee River, Carson River, and Walker River Basins, approved in 1971, allocates a total annual surface water and groundwater diversion of 23,000 acre-feet per year within the California portions of the Lake Tahoe Basin. In 1972, the SWRCB adopted the Policy for the Administration of Water Rights in the Lake Tahoe Basin establishing that all surface water and groundwater diversions are not to exceed the allocations defined in the compact. SWRCB prepared a draft report in 1984 titled Policy for Water Allocation in the Lake Tahoe Region. This report was termed draft since both the State of California and the State of Nevada were using the compact for water allocations in the Lake Tahoe Region. The compact allocated a maximum of 23,000 acre-feet for use on the California side of the basin; however, the report recommended that the allocation be split between public (State and federal) and private lands. The report allocated a maximum of 12,493 acre-feet per year for use within the STPUD (City of South Lake Tahoe 2010).

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances may apply to the Project:

Chapter 33, *Grading and Construction*, applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction.

Chapter 35, *Natural Hazard Standards*, sets forth regulations pertaining to recognition of natural hazards, prevention of damage to property, and protection of public health relating to such natural hazards. It implements provisions of the Goals and Policies and the Water Quality Management Plan for the Lake Tahoe Region pertaining to avalanche and mass instability, floodplains, and wildfire.

Chapter 60, *Water Quality*, sets forth standards for the discharge of runoff water from parcels and regulates the discharge of domestic, municipal, or industrial wastewater. These standards and prohibitions apply to discharges to both surface waters and ground waters.

TRPA Regional Plan

Hydrology and water quality is addressed in the Water Quality Subelement of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b). The Water Quality Subelement contains the following goals and policies that apply to the Project:

- **Goal WQ-1:** Federal, State, regional, local and private water quality management programs should be implemented in a coordinated manner to restore and maintain Lake Tahoe’s unique transparency, color and clarity in accordance with environmental threshold carrying capacity standards.
 - **WQ-1.3:** Require that development and other activities in the Lake Tahoe region mitigate anticipated water quality impacts.
 - **WQ-1.6:** Support federal, state, local and private water quality improvement programs that improve water quality in the Region.
- **Goal WQ-3:** Reduce or eliminate non-point sources of pollutants which affect, or potentially affect, water quality in the Tahoe Region in a manner consistent with the Lake Tahoe TMDL, where applicable.
 - **Policy WQ-3.12:** Projects shall be required to meet TRPA BMP requirements as a condition of approval for all projects. All projects shall be required, as a condition of approval, to apply BMPs to the project parcel during construction and as follows upon completion of construction:
 - A. New projects on undeveloped parcels shall require application and maintenance of temporary and permanent BMPs as a condition of project approval.
 - B. Projects which expand structures or land coverage shall require application and maintenance of temporary and permanent BMPs to the project area.
 - C. Rehabilitation projects, other than minor utility projects, shall require the preparation of a plan and schedule for application and maintenance of temporary and permanent BMPs to the entire parcel. The amount of work required pursuant to the project approval shall consider the cost and nature of the project.

D. Where area-wide treatments are approved, projects shall install improvements in accordance with the approved area-wide BMP plan.

- **Policy WQ-3.13:** Maintain the BMP handbook to include special construction techniques, discharge standards, and development criteria applicable to projects in the shorezone. Sediment and other discharges from shorezone construction or dredging have an immediate and obvious impact on water clarity in localized areas and are harmful to fish. Proper construction techniques and other measures shall be required as necessary to mitigate activities in the shorezone and to protect the natural values of the shorezone.

Tahoe Sierra Integrated Regional Water Management Plan

The Tahoe Sierra Integrated Regional Water Management Plan (IRWMP) was developed in 2006 by the Tahoe Sierra Regional Water Management Group, a collaboration of 16 public agencies, special districts, nonprofit organizations, and educational institutions. The IRWMP integrates a set of coordinated strategies for the management of water resources and for the implementation of projects that protect the participating communities from drought, protect and improve water quality, and improve local water security. The IRWMP is based on historical research and development of other water management and land use planning documents in the region (City of South Lake Tahoe 2010).

Local Regulations

El Dorado Water Agency

The El Dorado Water Agency (EDWA) works with local, regional, State, and federal partners to provide an integrated water management approach to ensure the County has reliable, accessible, and affordable water to meet urban and agricultural needs. EDWA oversees the implementation of water supply and quality programs, including compliance with State regulations under the California Water Code and federal standards such as the Clean Water Act. The following plans apply to the proposed Project:

Water Resources Development and Management Plan

EDWA completed the 2019 Water Resource Development and Management Plan (WRDMP) for El Dorado County, which outlines the framework for managing the County's water resources through 2040. It addresses the need for a reliable water supply, protection of water quality, and infrastructure enhancements. The WRDMP includes a comprehensive assessment of current water resources, projections for future demand, and measures to improve water conservation and system resilience. It underscores the necessity of aligning land use planning with water resource management to tackle issues such as drought, climate change, and population growth (EDWA 2019).

West Slope Stormwater Resource Plan

The 2018 West Slope Storm Water Resource Plan (SWRP) provides a comprehensive framework for managing stormwater resources on the western slope of the County. The SWRP was developed in accordance with SB 985, enacted in 2014 which amended the Stormwater Resource Planning Act of 2009. SB 985 incentivized and promoted stormwater resource planning efforts that include both wet and dry weather flow management and outlined the requirements for a SWRP. The County's SWRP evaluates hydrologic conditions, land use patterns, and existing stormwater infrastructure, using data

from regional hydrological studies and water quality assessments to inform its recommendations. It aligns with regulatory requirements under the California Water Code and the SWRCB guidelines, including compliance with NPDES permits and TMDLs. The plan outlines sustainable management practices and infrastructure improvements designed to enhance water quality, reduce flood risks, and protect ecological systems (EDWA 2018).

Tahoe Valley South Basin Groundwater Sustainability Plan

As previously mentioned, the Tahoe South Groundwater Subbasin is a sedimentary groundwater basin within the southern portion of the larger Tahoe Valley Groundwater Basin. According to the SGMA 2019 Basin Prioritization, this subbasin was determined to be of medium priority. Under SGMA, high- and medium-priority basins, as designated by the DWR, must establish GSAs that oversee the preparation and implementation of a local GSP. EDWA and STPUD work together to manage groundwater within the local basin under a Memorandum of Understanding. EDWA is the GSA for the Tahoe South Subbasin for the portions of the subbasin outside of the STPUD service area. The Alternative Plan for Tahoe Valley South Subbasin serves as the Groundwater Management Plan for this portion of the Tahoe Basin (DWR 2024b; DWR 2020).

El Dorado County Code

Chapter 8.79, *Stormwater Quality*, is intended to ensure the County is compliant with State and federal laws; protect the health, safety, and general welfare of the citizens of El Dorado County; enhance and protect the quality of waters of the State in El Dorado County by reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to a stormwater facility; and require use of BMPs that will reduce the adverse effects of polluted runoff discharges on waters of the State. The Stormwater Quality Ordinance prohibits illicit discharges to a stormwater facility and establishes authority to adopt requirements for stormwater management and for development projects to reduce stormwater pollution and erosion during construction and operation.

Chapter 110.14, *Grading, Erosion, and Sediment Control*, regulates grading within the unincorporated areas of El Dorado County in order to protect life, limb, health, property and public welfare; avoid pollution of watercourses; and ensure that the intended use of a graded site is consistent with the General Plan and any specific adopted plans, including the Western El Dorado County Storm Water Management Plan, State Fire Safe Standards, and relevant El Dorado County ordinances. The ordinance establishes the procedures for the issuance of grading permits, approval of plans, and inspection of construction sites. The ordinance also requires that waterways and adjacent properties be protected from erosion, flooding, or sediment deposits that could result from grading activities.

Chapter 130.32, *Flood Damage Prevention Ordinance*, implements General Plan Policy 6.4.1.1 requiring continued participation in the National Flood Insurance Program in order to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. This Chapter serves to provide legally enforceable regulations applied uniformly throughout the community to all publicly and privately owned land within flood prone areas.

El Dorado County General Plan

Hydrology and water quality is addressed within the *Public Services and Utilities Element*; *Public Health, Safety, and Noise Element*; and *Conservation and Open Space Element* of the County General Plan.

The *Public Services and Utilities Element* contains the following goals, objectives, and policies that apply to the Project (County 2015):

- **Goal 5.4: Storm Drainage.** Manage and control storm water runoff to prevent flooding, protect soils from erosion, prevent contamination of surface waters, and minimize impacts to existing drainage infrastructure.
 - **Objective 5.4.1: Drainage and Flood Management Program.** Initiate a County-wide drainage and flood management program to prevent flooding, protect soils from erosion, and minimize impacts on existing drainage facilities.
 - **Policy 5.4.1.1:** Require storm drainage systems for discretionary development that protect public health and safety, preserve natural resources, prevent erosion of adjacent and downstream lands, prevent the increase in potential for flood hazard or damage on either adjacent, upstream or downstream properties, minimize impacts to existing facilities, meet the National Pollution Discharge Elimination System (NPDES) requirements, and preserve natural resources such as wetlands and riparian areas.
 - **Policy 5.4.1.2:** Discretionary development shall protect natural drainage patterns, minimize erosion, and ensure existing facilities are not adversely impacted while retaining the aesthetic qualities of the drainage way.

The *Public Health, Safety, and Noise Element* contains the following goal, objective, policies, and implementation measure that apply to the Project (County 2019):

- **Goal 6.4: Flood Hazards.** Protect the residents of El Dorado County from flood hazards.
 - **Objective 6.4.1: Development Regulations.** Minimize loss of life and property by regulating development in areas subject to flooding in accordance with Federal Emergency Management Agency (FEMA) guidelines, California law, and the El Dorado County Flood Damage Prevention Ordinance.
 - **Policy 6.4.1.1:** The County shall continue participation in the National Flood Insurance Program and application of flood plain zoning regulations.
 - **Policy 6.4.1.2:** The County shall identify and delineate flood prone study areas discovered during the completion of the master drainage studies or plans.
- **Implementation Measure HS-H:** Continue to participate in the Federal Flood Insurance Program, maintain flood hazard maps and other relevant floodplain data made available by other sources, and revise or update this information as new information becomes available. In its review of applications for building permits, discretionary project applications, and capital improvement proposals, the County shall determine whether the proposed project is within the 100-year floodplain based on these data. [Policies 6.4.1.1 and 6.4.1.2]

The *Conservation and Open Space Element* contains the following goals, objectives, policies, and implementation programs that apply to the Project (County 2017):

- **Goal 7.1: Soil Conservation.** Conserve and protect the County's soil resources.
 - **Objective 7.1.2: Erosion/Sedimentation.** Minimize soil erosion and sedimentation.
 - **Policy 7.1.2.1:** Development or disturbance of slopes over 30 percent shall be restricted. Standards for implementation of this policy, including but not limited to exceptions for access, reasonable use of the parcel, and agricultural uses shall be incorporated into the Zoning Ordinance.
 - **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.
- **Goal 7.3: Water Quality and Quantity.** Conserve, enhance, and manage water resources and protect their quality from degradation.
 - **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 BMPs, as identified by the Natural Resources Conservation Service (NRCS), 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.
 - **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.
 - **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 USACE Wetland Delineation Manual.
- **Objective 7.3.4: Drainage.** Protection and utilization of natural drainage patterns.
 - **Policy 7.3.4.2:** Modification of natural stream beds and flow 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 7.3.5.4:** 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.
- **Implementation Measure CO-A:** Review the Zoning Ordinance to identify revisions that accomplish the following:
 - E. Develop standards for minimizing erosion and sedimentation associated with earthwork and grading. [Policy 7.1.2.2]
- **Implementation Measure CO-G:** Create guidelines for development projects that may affect surface water resources. The guidelines should include:
 - Definition(s) of surface water resources;
 - Criteria for determining the presence of surface water resources;
 - Buffer standards;
 - Mitigation standards; and
 - Use of BMPs. [Policies 7.3.1.1, 7.3.2.1, 7.3.3.1, 7.3.3.2, and 7.3.4.2]

City of Placerville Stormwater Management Plan

The City of Placerville Stormwater Management Plan outlines strategies and BMPs to prevent pollution into the City's tributaries and protect water quality. The City of Placerville is within the Hangtown Creek, Big Canyon Creek, and Weber Creek watersheds, which are tributaries to the South Fork American River. The USEPA established programs to address stormwater discharges from Municipal Separate Storm

Sewer Systems (MS4s) and industrial and construction activities to surface waters. The City of Placerville was designated by the RWQCB as the owner and operator of a Small MS4. The purpose of a General Small MS4 Permit is to protect water quality from urban runoff pollution and is accomplished through compliance and implementation of a Stormwater Management Plan (City of Placerville 2005).

City of Placerville City Code

Chapter 8.7, *Grading Ordinance*, of the City of Placerville City Code sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of plans and inspection of grading construction and all grading specific to single parcel site improvements, except single-family residence construction unless exceeding prescriptive standards as defined in the City's design and improvement standards manual. Where the grading or earthwork involves multiple parcels, parcel maps, subdivisions, land divisions, or roads the design and improvement standards manual shall be used for design purposes.

Chapter 7.15, *Stormwater Quality Ordinance*, intends to ensure that the City of Placerville is compliant with State and federal laws and fulfills its requirements to: 1) protect the health, safety, and general welfare of the citizens of the city of Placerville; 2) enhance and protect the quality of waters of the State in the city of Placerville by reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to a stormwater facility; and 3) to cause the use of BMPs by the City and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the State.

City of Placerville General Plan

Hydrology and water quality is addressed within *Section V – Natural, Cultural, and Scenic Resources* of the City of Placerville General Plan (City of Placerville 2004). The *Natural, Cultural, and Scenic Resources* section contains the following goal, policies, and implementation program that apply to the Project:

- **Goal A:** To conserve water resources and protect water quality within the Placerville area.
 - **Policy 1:** The City of Placerville shall promote water conservation in both public and private developments.
 - **Policy 5:** The City of Placerville shall require in new development sound anti-pollution practices to protect water quality.
 - **Policy 7:** The City of Placerville shall condition approvals of development in hillside areas to minimize erosion and silt flows into watercourses.
- **Implementation Program 3:** The City of Placerville shall prepare and adopt a grading and erosion and sediment control ordinance.

City of South Lake Tahoe Stormwater Management Program

The City of South Lake Tahoe's Stormwater Management Program works to control and reduce the discharge of fine sediment, nutrients, and other pollutants from private lands and City streets and

facilities into streams and beaches along the Lake Tahoe shoreline. The Stormwater Management Program oversees and implements the following plan that applies to the proposed Project:

Drainage Master Plan

In 2008, the City of South Lake Tahoe completed a Drainage Master Plan to provide a comprehensive review of drainage conditions within the City. The report evaluated watershed hydrology, drainage problem areas, and potential projects to address prioritized drainage problems. Projects included in the 2008 Drainage Master Plan were identified to address nuisance flooding, property damage and protect the clarity of Lake Tahoe (City of South Lake Tahoe 2008).

City of South Lake Tahoe City Code

Chapter 7.15, *Urban Runoff and Stormwater Quality Management Ordinance*, is enacted to protect and promote the health, safety and general welfare of the citizens of the city and to protect and enhance the water quality, beneficial uses, habitats and ecosystems in receiving waters by reducing pollution and pollutant loads discharged in urban runoff from areas within the City's jurisdiction by the maximum extent practicable, and by prohibiting non-storm water discharges to municipal storm drain systems. This chapter is intended to assist in protection and enhancement of watercourses, water bodies (such as Lake Tahoe), and wetlands in a manner pursuant to and compliant and consistent with the CWA, Porter-Cologne Water Quality Control Act, and NPDES.

Chapter 7.20, *Grading, Erosion and Sediment Control*, is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) To avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and (3) To ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and State or federal law, this chapter shall prevail unless preempted by the State or federal law. In the event of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Hydrology and water quality is addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goal, policies, and implementation program that apply to the Project:

- **Goal NCR-2:** To protect and enhance the clarity of Lake Tahoe and water quality in the area's rivers, creeks, and groundwater.
 - **Policy NCR-2.1: Stormwater Runoff Retention.** The City of South Lake Tahoe shall require new projects and, working with TRPA, encourage existing developed properties to retain runoff onsite wherever physically possible and economically efficient or, if not possible or efficient, to contribute to the construction and long-term maintenance of off-site water quality measures.

- **Policy NCR-2.2: Hazardous Materials.** The City of South Lake Tahoe shall ensure hazardous materials do not reach Lake Tahoe, any of its tributaries, or contaminate Stream Environment Zones or groundwater resources.
- **Policy NCR-2.3: Stormwater Quality Management Improvement.** The City of South Lake Tahoe shall improve stormwater quality management by including, along with other proven options, the use of swales and natural treatment systems and integration of runoff into functional design elements and public art. The City shall also incorporate the latest technologies for water quality treatment facilities into restoration efforts.
- **Implementation Program IMP-8.1: Stormwater Management Master Plan.** The City of South Lake Tahoe shall adopt and regularly update a stormwater management master plan that identifies ways to minimize runoff, improve area-wide stormwater retention, and reuse. The stormwater management plan shall also include a program to ensure ongoing operation, maintenance, inspection, and long-term funding of private and public water quality control features. [Policy NCR-2.3]

4.10.1.2 Existing Conditions

Hydrology

Surface Water

Surface water on the western slope of El Dorado County is contained in three principal watersheds: the Middle Fork American River, the South Fork American River, and the Cosumnes River. The two largest watersheds in the Tahoe Basin are the Upper Truckee River and Trout Creek watersheds. Additionally, the City of South Lake Tahoe is situated at the end of Lake Tahoe and encompasses an area of approximately 6.4 square miles of the lake.

Middle Fork American River

The Middle Fork American River watershed encompasses the northern region of the County and the southern region of Placer County. El Dorado County's portion of the watershed extends from the headwaters at Rockbound Valley in Desolation Wilderness, west to its terminus at the confluence with the North Fork American River, east of Auburn. The Rubicon River is the main tributary flowing into the Middle Fork and receives flow upstream from the South Fork Rubicon River and Pilot Creek. Other principal water features within the watershed include Rubicon Reservoir, Loon Lake, Gerle Creek Reservoir, Robbs Peak Reservoir, and Stumpy Meadow Reservoir. The peak runoff from this watershed, where precipitation occurs primarily as snowfall in the upper elevations of the watershed and rainfall in the lower elevations, is typically from March through June (County 2003).

South Fork American River

The South Fork American River watershed encompasses the central region of the County, extending from the headwaters at Echo Summit, west to the terminus at Folsom Reservoir. The major tributaries contributing flow directly into the South Fork American River are Silver Fork American River, Silver Creek, Slab Creek, Rock Creek, and Weber Creek. The upstream tributaries are Caples Creek, South Fork Silver Creek, and Jones Fork Silver Creek. Other water features within the watershed are Caples Lake, Silver Lake, Lake Aloha, Weber Reservoir (all managed by El Dorado Irrigation District [EID]), Icehouse

Reservoir, Union Valley Reservoir, Junction Reservoir, Camino Reservoir, Brush Creek Reservoir, Slab Creek Reservoir (all managed by Sacramento Municipal Utility District [SMUD]), and Chili Bar Reservoir (managed by Pacific Gas and Electric [PG&E]). The peak runoff from this watershed, where precipitation occurs primarily as snowfall in the upper elevations of the watershed and rainfall in the lower elevations, is typically from March through June (County 2003).

Cosumnes River

The Cosumnes River watershed encompasses the southern region of El Dorado County and the northwestern region of Amador County. The watershed extends from the headwaters along the Iron Mountain Ridge west to where the Cosumnes River enters Sacramento County. The major tributaries flowing directly into the Cosumnes River are the South, Middle, and North Fork Cosumnes Rivers, and Canyon Creek. Both Deer Creek and Carson Creek are also tributaries to the Cosumnes. The creeks drain a significant portion of western El Dorado County in the Cameron Park and El Dorado Hill/Latrobe areas, respectively. Bass Lake and Sly Park Reservoir are located in the Carson Creek watershed. The watershed of the Cosumnes River is lower in elevation than the Middle Fork and South Fork American Rivers, with only about 16 percent of it above the 5,000-foot elevation. The peak runoff from the Cosumnes River, where precipitation occurs primarily as rainfall, is from January through April (County 2003).

Upper Truckee River

The Upper Truckee River and its tributaries, which make up the Upper Truckee River watershed, comprise the largest contribution to the waters of Lake Tahoe. As the largest watershed in the Lake Tahoe Basin, the Upper Truckee' drainage area occupies approximately 56.5 square miles, which is 18 percent of the total land area tributary to Lake Tahoe (314 square miles). The Upper Truckee River main channel length is approximately 21.4 miles and is entirely located within the Planning Area. The Truckee River headwaters stem from the Stevens Peak and Red Lake Peak area near Carson Pass, both sides of Echo Peak, the south and eastern drainages of Ralston Peak, Grass Lake (meadow), and Big Meadow. As the Upper Truckee flows toward Lake Tahoe, the topography levels as the river reaches its floodplain. Threatened Lahontan cutthroat trout have been reintroduced into the river in the Meiss Meadows area, and the endangered shore zone plant Tahoe yellow cress is found near the mouth of the river on the shores of Lake Tahoe. The lower reach of the river flows through the unincorporated community of Meyers and the City of South Lake Tahoe (City of South Lake Tahoe 2010).

Trout Creek

The Trout Creek watershed is the second largest in the Lake Tahoe Basin and occupies approximately 41.2 square miles, which is 13 percent of the total land area tributary to Lake Tahoe. Trout Creek has a main channel length of approximately 12.1 miles. The Trout Creek watershed is a major sub-watershed of the Upper Truckee River. Trout Creek enters the river just before it drains into Lake Tahoe. Historically, Trout Creek was a tributary to the Upper Truckee River in the Truckee Marsh area near Lake Tahoe. However, due to development of the Tahoe Keys, the Upper Truckee River was channeled to the lake, and currently the streamflow of the two tributaries combines only during high runoff. Due to this historical combination of the Upper Truckee River and Trout Creek on the surface, speculation is that their groundwater systems also may combine at some point. Named tributaries of Trout Creek include Saxon, Cold, and Heavenly Valley creeks (City of South Lake Tahoe 2010).

Lake Tahoe

Lake Tahoe is a tributary watershed drainage element within the Truckee River Basin, and its sole outlet is the Truckee River. Lake Tahoe is a designated Outstanding National Resource Water under federal antidegradation regulations and is renowned for its extraordinary clarity, purity, and deep blue color. Lake Tahoe is the tenth deepest lake in the world, rivaled only by Crater Lake and Lake Baikal in Russia for its combination of size, scenic beauty, and unique ecological qualities. Lake Tahoe has a mean depth of 1,027 feet and a maximum depth of 1,645 feet. Much of the beauty of the lake comes from its extraordinary transparency and related deep blue color. Secchi depths of over 131 feet were measured in the 1960s, and the lake historically transmitted enough light to support beds of attached mosses and other plants at depths of up to 400 feet (City of South Lake Tahoe 2010).

Groundwater

El Dorado County stretches from the foothills to the higher elevations of the Sierra Nevada province, where the subsurface material consists primarily of impervious granitic and greenstone bedrock, which generally produces a low or unpredictable groundwater yield. The general hydrogeology of the County is typical of granitic mountainous terrain, where groundwater is controlled by the weathering and structure of the bedrock. The occurrence and flow of groundwater is significantly different in fractured bedrock conditions than in unconsolidated sediments (e.g., porous sands and gravels). In this type of hydrogeologic environment, the presence of groundwater and potential well capacities are dependent not only on geographic location and geology, but also on the number and size of fractures encountered where a well is drilled, the degree of connectivity between those fractures and other fractures, and the seasonal and annual recharge of the bedrock fracture network.

The geology of the western slope of the County is primarily hard crystalline or metamorphic rock, which forms the land surface or is covered by a thin soil or isolated alluvial layer. As such, groundwater does not penetrate the hard rock mass, although groundwater can be found in fractures below the ground surface. Previous studies regarding groundwater availability in fractured rock indicate that well yields generally decline over time and that recharge is dependent primarily on the ability of localized precipitation to infiltrate into fractures. Additionally, water, if present, is usually found most abundantly in the first 250 feet of depth. Therefore, the long-term reliability of groundwater cannot be estimated with the same level of confidence as a porous or alluvial aquifer, which is common to the Central Valley of California (County 2003).

The Tahoe South Groundwater Subbasin is a sedimentary groundwater basin within the southern portion of the larger Tahoe Valley Groundwater Basin. The subbasin occupies a roughly triangular area of about 14,800 acres (23 square miles) and is bounded on the southwest and southeast by the Sierra Nevada, on the north by the southern shore of Lake Tahoe, and to the northeast by the California-Nevada state line. Elevations in the groundwater subbasin range from 6,225 feet at lake level to above 6,500 feet in the south. The principal source of groundwater in the subbasin is from Tertiary and Quaternary age glacial, fluvial (river), and lacustrine (lake) sediments, collectively referred to as basin-fill deposits. Most water wells drilled in the subbasin are completed in basin-fill deposits where groundwater occurs under confined, semi-confined, and unconfined conditions. Pre-Cretaceous granitic rocks form the base of the aquifer. Snowmelt is the primary source of recharge to the groundwater basin. Other sources of groundwater recharge include stream-flow seepage and groundwater inflow from the surrounding bedrock. In general, the movement of groundwater through the subbasin is south to north, toward Lake Tahoe, which is the dominant hydrologic feature in the region. Areas of

groundwater discharge in the subbasin occur along the upper reaches of the Upper Truckee River and Trout Creek, in wetland areas situated near the South Shore of Lake Tahoe, and directly into Lake Tahoe, where basin-fill deposits intersect the shoreline. Additional sources of groundwater discharge include groundwater pumping, evapotranspiration, and seepage to springs (City of South Lake Tahoe 2010).

Water Quality

Surface Water Quality

There are a number of surface water quality concerns in the County associated with different types of land uses and activities. Surface water quality in the County can be impacted by grading and construction activities, agricultural uses, livestock and confined animals, urban runoff, sewage and other wastewater from treatment plants, industrial sources, and recreational activities (County 2003). For additional information on wastewater and stormwater drainage, see Section 4.19, *Utilities and Service Systems*, of this program EIR. Runoff from these sources may pass through the County's tributary streams before entering the watersheds. Water quality in the County is under the jurisdiction of the CVRWQCB and the LRWQCB, which are responsible for implementation of State and federal water quality protection guidelines within El Dorado County. Under Section 303(d) of the CWA, there are several County waterbodies on the 2018 California Integrated Report's list of impaired waterbodies due to varying pollutant sources. In the western slope of the County, the following waterbodies under the CVRWQCB's jurisdiction were identified as impaired waterbodies: North/Middle Fork American River, South Fork American River, Coon Hollow Creek, North Canyon Creek, Oxbow Reservoir, and Slab Creek Reservoir. In the Tahoe Basin, the following waterbodies under the LRWQCB's jurisdiction were identified as impaired waterbodies: Bijou Park Creek, Cold Creek, General Creek, Heavenly Valley Creek, Lake Tahoe, Tallac Creek, Trout Creek, and Truckee River (SWRCB 2018).

Groundwater Quality

As previously discussed, the geology of the western slope of the County is primarily hard crystalline or metamorphic rock, which forms the land surface or is covered by a thin soil or isolated alluvial layer. As such, groundwater does not penetrate the hard rock mass, although groundwater can be found in fractures below the ground surface. Further, the geology of the County complicates the identification of groundwater recharge areas. As groundwater is found mostly in fractured rock rather than alluvial aquifers, it is stored in highly localized pockets. Therefore, it is difficult to target these areas for protection from inappropriate uses, including the discharge of pollutants. Faulting and fractures may provide a means for direct infiltration of harmful substances into a fractured-rock aquifer. Therefore, geologic considerations are critical in the siting of septic systems and of agricultural and industrial facilities to prevent contamination of groundwater.

According to the Draft Environmental Impact Report prepared in 2003 for the County's General Plan (General Plan EIR), groundwater quality in the County is considered good to excellent, but there is no reliable database. Additionally, the geologic material the water is drawn from can greatly influence its quality. As the County's population increases and more people rely upon local groundwater for their water supply, groundwater quality becomes a more prominent concern. Major sources of potential groundwater pollution include onsite wastewater treatment systems (OWTS) or septic leach fields, underground storage tanks (USTs), spillage of hazardous materials or commercial waste, and infiltration of agricultural byproducts, including fertilizer and livestock waste. Groundwater quality is also affected by the types of surface water pollution described above. For additional information on SWRCB-regulated

hazardous spills, leaks, investigations, and cleanup sites in El Dorado County, see Section 4.9, *Hazards and Hazardous Materials*, of this program EIR.

Flood Hazards

Flood hazards that may occur in El Dorado County include flooding caused by precipitation, dam failure, and seismic activities. A flood has many implications for public safety. Hazards and damage caused by flooding includes loss of life, displacement or complete destruction of buildings, siltation, temporary loss of utilities, road and bridge damage resulting in transportation slowdowns, loss of goods and services, and the threat of waterborne diseases.

Floods from rainstorms generally occur between November and April and are characterized by high peak flows of moderate duration. Snowmelt floods combined with rain have larger volumes and last longer than rain flooding. According to the General Plan EIR, the primary flood-prone areas on the western slope of the County are: South Fork American River from Kyburz to Riverton and below Chili Bar Dam; Coloma Canyon Creek between Greenwood and Garden Valley; Weber Creek from Placerville to the American River, including Cold Springs, Dry Creek, and Spring Creek tributaries; Shingle Creek from Shingle Springs to the Amador County line; Deer Creek from Cameron Park to Sacramento County line; Big Canyon Creek from El Dorado to the Cosumnes River, including the Slate, Little Indian, and French Creek tributaries; New York Creek; Middle Fork of the Cosumnes River within the Somerset-Fairplay vicinity, and its confluence with the North Fork of the Cosumnes River; and Cedar Creek from Omo Ranch to the Cosumnes River (County 2003).

In the Tahoe Basin, the majority of the floodplain surrounds the Upper Truckee River. A few developed areas along the Upper Truckee River are located within the 100-year floodplain. Flooding in these areas occurs in response to rainfall and rain-on-snow events. High lake levels may contribute to flooding. Flooding in the residential areas is associated with inadequate drainage facilities for conveyance of stormwater runoff or construction within floodplains. The other major creek in the area surrounded by the 100-year floodplain is Trout Creek. However, portions of the Tahoe Keys area (located adjacent to Lake Tahoe) and the Bijou Creek area are also susceptible to flooding and are located within the 100-year floodplain. There are also small areas within the 500-year floodplain around Bijou Creek, Trout Creek, and the Upper Truckee River (South Lake Tahoe 2010).

Due to the lack of extensive low-lying areas and a large number of upland areas, the majority of El Dorado County is not subject to flooding. However, as discussed in the following subsection, failure of a water impoundment structure, such as a dam, can result in flood hazards.

Dam Inundation

A dam failure can occur as the result of an earthquake, as an isolated incident because of structural instability, or during heavy runoff that exceeds spillway design capacity. According to the California DWR, El Dorado County does not have a history of major dam failure (County 2003).

There are 57 dams in El Dorado County identified by the U.S. Army Corps of Engineers' National Inventory of Dams (USACE 2024). Of these dams, the Dam Inundation Map of the El Dorado County *Public Health, Safety, and Noise Element*, identifies 11 dam inundation areas in the County. Additionally, there is one dam inundation area in the City of South Lake Tahoe. Of these 12 dam inundation areas, three of the dam inundation areas are due to dams located in Placer County, north of the El Dorado County line, and operated by the Placer County Water Authority (PCWA). As summarized in Table 4.10-1

below, dams with potential for dam inundation in El Dorado County range in size from those that retain large reservoirs dedicated to irrigation, water supply, and power generation, to small facilities used in water distribution and treatment systems or for recreation. Dam safety is primarily the responsibility of the dams' operators.

Table 4.10-1
DAM INUNDATION AREAS IN EL DORADO COUNTY

Dam	Location	Operator	Use
<i>Inundation areas from dams located in El Dorado County</i>			
Cameron Park Dam	Deer Creek	Cameron Park Community Services District	Water supply, irrigation
Chili Bar Dam	South Fork American River	PG&E	Hydroelectricity
Echo Lake Dam	Echo Creek	EID	Hydroelectricity, recreation, debris control
Emergency Effluent Holding Dam	Heavenly Valley Creek	STPUD	Wastewater treatment
Ice House Dam	South Fork Silver Creek	SMUD	Hydroelectricity, recreation
Loon Lake Dam	Gerle Creek	SMUD	Hydroelectricity, recreation
Sly Park Dam	Sly Park Creek	EID	Water supply, irrigation, recreation
Stumpy Meadows Dam (Mark Edson Dam)	Pilot Creek	Georgetown Divide Public Utility District	Water supply, tailings, irrigation, recreation
Weber Dam	North Fork Weber Creek	EID	Water supply, irrigation
<i>Inundation areas from dams located in Placer County</i>			
LL Anderson Dam	Middle Fork American River	PCWA	Hydroelectricity, recreation
Lower Hell Hole Dam	Rubicon River	PCWA	Water supply, recreation, hydroelectricity
Ralston Afterbay Dam	Rubicon River	PCWA	Irrigation, water supply, recreation, hydroelectricity

Source: County 2024, City of South Lake Tahoe 2010.

There are no dams dedicated to flood control on the western slope of the County or in the Lake Tahoe Basin. There is only one known levee in El Dorado County (in El Dorado Hills near Carson Creek). However, this levee is privately owned, and it is unknown whether this levee is certified for flood control purposes (County 2003).

Seiche

El Dorado County is separated from the Pacific Ocean by approximately 130 miles, so the County is not at risk from tsunamis. However, the Lake Tahoe Basin of the County could be at risk from seiche waves in Lake Tahoe. A seiche is an earthquake-generated wave in an enclosed body of water, such as a lake, reservoir, or bay.

As discussed in Section 4.7, *Geology and Soils*, of this program EIR, based on the characteristics of the fault system in El Dorado County, the potential for significant seismic activity to occur in the County over the planning horizon is limited. However, a small (0.4-foot) wave surge was reported in Lake Tahoe

during the 1966 Truckee earthquake, which had a Richter Scale magnitude of between 6.0 and 6.9 (County 2003).

A study completed in 1999 (The Potential Hazard from Tsunami and Seiche Waves Generated by Future Large Earthquakes Within the Lake Tahoe Basin), in which three earthquake scenarios within the Lake Tahoe Basin were modeled, indicated that an earthquake with a magnitude 7 would pose a potential hazard to shoreline development in both California and Nevada, including initial tsunami waves followed by seiche waves ranging from 3 to 10 meters high, as well as inundation of subsided areas. Shoreline areas below 6,239 feet elevation could be subject to seiche inundation (City of South Lake Tahoe 2010).

4.10.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, Project-related impacts to hydrology and water quality would be significant if the proposed Project would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of a basin;
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows;
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and,
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.10.3 Impact Analysis

HYD-1 The proposed project would not violate water quality standards or waste discharge requirements or otherwise degrade surface or groundwater quality.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on utility pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements.

Construction

Construction methods for individual fiber projects, including horizontal directional drilling, plowing, trenching, microtrenching, line installation, aerial stringing, and pavement repair, have the potential to impact water quality through soil erosion and increased silt and debris discharged via surface runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Temporary storage of construction materials and equipment in work or staging areas could create the potential for a release of hazardous materials, trash, or sediment to the storm drain system. Individual fiber projects that would result in disturbance of an area greater than one acre would be required to enroll for coverage under the Storm Water Construction General Permit (Construction General Permit) for the NPDES program. The Construction General Permit requires that a project-specific SWPPP be prepared, and BMPs be implemented during construction of individual fiber projects. Typical BMPs would include diversion of runoff from disturbed areas, protective measures for sensitive areas, temporary soil stabilization measures, storm water runoff quality control measures, concrete waste management, watering for dust control, and installation of perimeter silt fences, as needed. Therefore, compliance with the Construction General Permit would reduce construction-related impacts to a less than significant level.

Operation

Once individual fiber projects are constructed, they would require occasional operational maintenance needs. All construction areas would be cleared after construction is completed and all debris would be removed. As operation of individual fiber projects would require only a limited amount of temporary ground disturbance during maintenance activities, operational impacts would be less than significant.

Impact Conclusion

Implementation of the proposed Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and the impact on water quality would be less than significant.

Significance without Mitigation: Less than significant impact.

HYD-2 The project would not decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

The western slope of El Dorado County does not have traditional groundwater basins. The geology of the western slope of the County is primarily hard crystalline or metamorphic rock, which forms the land surface or is covered by a thin soil or isolated alluvial layer. In this type of hydrogeologic environment, the presence of groundwater and potential well capacities are dependent not only on geographic location and geology, but also on the number and size of fractures encountered where a well is drilled, the degree of connectivity between those fractures and other fractures, and the seasonal and annual recharge of the bedrock fracture network. Located in the Lake Tahoe Basin, the Tahoe South Groundwater Subbasin is a sedimentary groundwater basin within the southern portion of the larger Tahoe Valley Groundwater Basin.

Construction of individual fiber projects could involve minor use of water for dust control, per El Dorado Air Quality Management District (EDCAQMD) Rule 223-1, which would be readily available from existing

sources. Operation of the individual fiber projects would not require additional water supplies as no population would be generated. Therefore, implementation of the proposed Project is not anticipated to substantially decrease groundwater supplies, and the impact would be less than significant.

Significance with Mitigation: Less than significant impact.

HYD-3 The project would not alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.

(i) result in substantial erosion or siltation on- or off-site;

Erosion is defined as a combination of processes in which the materials of the earth's surface are loosened, dissolved, or worn away, and transported from one place to another by natural agents. There are two types of soil erosion: wind erosion and water erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soil can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of facilities and impervious surfaces and the removal of vegetative cover.

According to the County General Plan EIR, critical slopes in the County are identified as slopes greater than 25 percent. Since much of El Dorado County is characterized as having steep slopes, there are many areas that are subject to erosion. However, there are numerous State and local regulations that limit the potential for development to substantially increase erosion.

Construction of the individual fiber projects would require ground disturbance from the following construction methods: horizontal directional drilling, plowing, trenching, microtrenching, line installation, aerial stringing, and pavement repair. The disturbed soil could be exposed to wind, water erosion, and the loss of topsoil. Any individual fiber project that disturbs greater than one acre of soil would be required to comply with the California Construction General Permit, which requires preparation and implementation of a SWPPP and specific BMPs to prevent erosion. Typical erosion-prevention measures such as silt fences, stakes, straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover would be used to minimize erosion impacts. Additionally, individual fiber projects implemented under the Project would be required to adhere to relevant State and local regulations, including the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*.

Therefore, if an individual fiber project would disturb more than one acre of soil, a SWPPP with project specific BMP would be implemented. Additionally, adherence to relevant State and local regulations would adequately address the potential effects on unstable slopes and erosion. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

- (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

As individual fiber projects would be constructed within existing County maintained ROW, public utility easements, and/or overhead public utility easements of record throughout the County, it is not likely that individual fiber projects would substantially increase the rate or amount of surface runoff in a manner which would result in flooding. After subsurface installation, any trenches or pits would be backfilled to pre-disturbance conditions. Due to the lack of extensive low-lying areas and a great deal of upland areas, the majority of El Dorado County is not subject to flooding. Additionally, individual fiber projects would comply with ordinances and construction standards of the County, TRPA, and cities of Placerville and South Lake Tahoe to prevent flooding within 100-year flood zones. Therefore, the impact on surface water runoff would be less than significant.

Significance without Mitigation: Less than significant impact.

- (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

As noted under Impact HYD-1, individual fiber projects that would result in disturbance of an area greater than one acre would be required to enroll for coverage under the Construction General Permit for the NPDES program. The Construction General Permit requires that a project-specific SWPPP be prepared, and BMPs be implemented during construction of individual fiber projects. Additionally, the Project would be required to conform to the *El Dorado County Grading, Erosion, and Sediment Control Ordinance* (County Code Section 110.14) which includes the use of BMPs to minimize degradation of water quality during construction and operation. Through implementation of BMPs, substantial new sources of runoff would be intercepted and prevented from entering drainage systems or surface waters.

Once constructed, individual fiber projects would require occasional operational maintenance needs that would not exceed the capacity of existing or planned stormwater drainage systems. Therefore, implementation of the proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

- (iv) Impede or redirect flood flows?

As discussed above under Impacts HYD-3 (i) and (iii), runoff associated with construction of individual fiber projects would be controlled through preparation and implementation of a SWPPP and associated BMPs. Additionally, the Project would be required to conform to the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*. Once constructed, individual fiber projects would require occasional operational maintenance needs which would not impede or redirect flood flows. Therefore, the impact on flood flows would be less than significant.

Significance without Mitigation: Less than significant impact.

HYD-4 The project would not risk release of pollutants due to project inundation due to flood hazards, tsunamis, or seiches.

El Dorado County is separated from the Pacific Ocean by approximately 130 miles, so the County is not at risk from tsunamis. As discussed in Section 4.7, *Geology and Soils*, of this program EIR, the western slope of El Dorado County is transected by the Foothills Fault System. The Lake Tahoe Basin is located in a region of active and potentially active faults including three faults located near the center of the City of South Lake Tahoe and a fourth located at its southern end. However, these faults have shown no history of fault ruptures and do not meet the criteria for building restrictions under the Alquist-Priolo Earthquake Fault Zoning Act.

Based on the characteristics of the fault system in El Dorado County, the potential for significant seismic activity to occur in the County is limited, therefore earthquake-induced seiches do not pose a risk to the majority of the County. Although a 0.4-foot wave surge was reported in Lake Tahoe during the 1966 Truckee earthquake, the history of earthquake-induced seiches in the Lake Tahoe Basin is minimal. There is one privately-owned levee in the County; however, it is unknown whether this levee is certified for flood control purposes. According to the California DWR, El Dorado County does not have a history of major dam failure. Due to these existing conditions within the County, implementation of the proposed Project would not release pollutants due to flood hazards, tsunamis, or seiches, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

HYD-5 The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

EDWA's WRDMP addresses the need for a reliable water supply, protection of water quality, and infrastructure enhancements in the County. The WRDMP includes a comprehensive assessment of current water resources, projections for future demand, and measures to improve water conservation and system resilience. The WRDMP includes regulatory components that build upon existing environmental programs and activities implemented by various County and city departments and focuses on land development activities subject to the County's permitting requirements. Individual fiber projects would comply with the WRDMP, as well as comply with ordinances and construction standards of the County, TRPA, and cities of Placerville and South Lake Tahoe. Individual fiber projects that disturb greater than one acre would comply with the Construction General Permit, which would include preparation and implementation of a SWPPP and associated BMPs. Additionally, the Project would be required to conform to the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*. Therefore, the proposed Project would not conflict with the WRDMP, and the impact would be less than significant.

The western slope of El Dorado County does not have traditional groundwater basins. However, the Tahoe South Groundwater Subbasin is a sedimentary groundwater basin within the southern portion of the larger Tahoe Valley Groundwater Basin. The Alternative Plan for Tahoe Valley South Subbasin serves as the Groundwater Management Plan for this portion of the Tahoe Basin. As discussed above under Impact HYD-2, construction of individual fiber projects could involve minor use of water for dust control, per EDCAQMD Rule 223-1, which would be readily available from existing sources. Operation of individual fiber projects would not require additional water supplies as no population would be

generated. Therefore, the proposed Project would not conflict with SGMA, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

4.10.4 Cumulative Impacts

HYD-6 The proposed project would not contribute to a significant cumulative impact with respect to hydrology and water quality resources.

Cumulative impacts related to hydrology and water quality would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, substantially degrade groundwater supplies or interfere substantially with groundwater recharge, substantially alter the existing drainage pattern of the site in a manner which would cause negative environmental effects, increase the risk release of pollutants in flood hazard, tsunami, or seiche zones, or conflict with or obstruct implementation of a water quality control plan or groundwater management plan. As discussed above under Impact HYD-1 through HYD-5, implementation of the proposed Project would result in a less than significant impact on hydrology and water quality.

The analysis of cumulative impacts is based on impacts of the Project and the other cumulative transportation projects in the County, as shown in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Similar to the proposed Project, the vast majority of these cumulative transportation projects could involve minor use of water for dust control during construction, which would be readily available from existing sources. Additionally, the operation of these cumulative transportation projects would not require additional water supplies as no population would be directly generated. While construction of individual fiber projects and cumulative projects within the County would have the potential to increase pollutants and degrade water quality as a result of project construction, projects that disturb greater than one acre would be required to comply with water quality standards as administered through the NPDES Construction General Permit. All cumulative projects that disturb greater than one acre would be required to prepare and implement a SWPPP with associated BMP and would be subject to the Tahoe Valley South Basin GSP, SWRP, and WRDMP, and County and city ordinances. Additionally, projects in the County are required to conform to the El Dorado County Grading, Erosion, and Sediment Control Ordinance. Therefore, the proposed Project would have a less than cumulatively considerable impact related to hydrology and water quality.

Significance without Mitigation: Less than significant impact.

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4.11 LAND USE AND PLANNING

This section describes the regulatory framework and existing conditions related to land use and planning and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on land use and planning were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to land use and planning.

4.11.1 Environmental Setting

4.11.1.1 Regulatory Framework

This section describes State, regional, and local environmental laws and policies that are relevant to the CEQA review process for land use and planning. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

State Regulations

All cities and counties are required by the State to adopt a general plan establishing goals and policies for long-term development, protection from environmental hazards, and conservation of identified natural resources (California Government Code 65300). California Government Code Section 65302 lists seven elements or chapters that cities and counties must include in their general plans: land use, circulation, housing, conservation, open space, noise, and safety.

Of the mandatory general plan elements, the land use element typically has the broadest scope. This central element describes the desired distribution, location, and extent of the jurisdiction's land uses, which may include housing, business, industry, open space, agriculture, natural resources, and recreation. Enjoyment of scenic beauty, education, public buildings and grounds, and solid and liquid waste disposal facilities are also typically addressed in the land use element.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin. The Regional Plan establishes numerous land use goals and policies that are relevant to the proposed Project (TRPA 2024a). Additionally, the TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024b).

Local Regulations

As stated above, land use and planning are the province of local governments in California. General plans lay out the pattern of future residential, commercial, industrial, agricultural, open space, and

recreational land uses within a community. To facilitate implementation of planned growth patterns, general plans typically also include goals and policies addressing the coordination of land use patterns with the development and maintenance of infrastructure facilities and utilities. Local jurisdictions implement their general plans by adopting zoning, grading, and other pertinent ordinances. Zoning identifies the specific types of land uses that are allowed on a given site and establishes standards for new development.

Unincorporated lands within the Project area are planned and managed according to the El Dorado County (County) General Plan, and incorporated lands are planned and managed by the City of Placerville General Plan and City of South Lake Tahoe General Plan. The following local regulations provide information on ordinances, goals, policies, and implementation programs relevant to the analysis of land use and planning in the County and incorporated cities of Placerville and South Lake Tahoe.

El Dorado County General Plan

Land use and planning is addressed within the *Land Use Element* of the County General Plan. The *Land Use Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2019):

- **Goal 2.2: Land Use Designations.** A set of land use designations which provide for the maintenance of the rural and open character of the County and maintenance of a high standard of environmental quality.
 - **Objective 2.2.5: General Policy Section.**
 - **Policy 2.2.5.14:** Buffers shall be established around future water supplies and other public facilities to protect them from incompatible land uses. Such buffer lands should be contained on-site where possible.
 - **Policy 2.2.5.15:** Any imposition of National Recreational Area or Wild and Scenic River designations on lands within El Dorado County shall be deemed inconsistent with this General Plan.
- **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.
 - **Objective 2.3.2: Hillsides and Ridge Lines.** Maintain the visual integrity of hillsides and ridge lines.
 - **Policy 2.3.2.1:** Disturbance of slopes 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.
 - **Policy 2.6.1.5:** All development on ridgelines shall be reviewed by the County for potential impacts on visual resources. Visual impacts will be assessed and may require methods such as setbacks, screening, low-glare or directed lighting, automatic light shutoffs, and external color schemes that blend with the surroundings in order to avoid visual breaks to the skyline.

- **Implementation Measure LU-A:** Review the Zoning Ordinance (Title 17 of the El Dorado County Code) to identify revisions that accomplish the following:
 - Identify and separate incompatible uses (including public facilities) by setbacks and buffering. [Policy 2.2.5.1]
- **Implementation Measure LU-E:** Review and identify needed revisions to the County of El Dorado Design and Improvements Standards Manual. [Policy 2.3.2.1]

El Dorado County Code

The County's primary regulatory tool for implementing the General Plan is its Zoning Ordinance (County Code Title 130). Zoning regulations restrict the extent and type of development that can occur in the unincorporated areas of the County. The ordinance identifies uses that are allowed by right in each zoning district and uses that require a special-use permit, temporary-use permit, or other permit or approval. In addition, the Zoning Ordinance identifies standards for development in various districts, including sign standards, off-street parking requirements, height, and building setback requirements. Development standards vary for each zoning district and may specify limitations on the dimensions of buildings, parcel sizes, setback dimensions, and land uses.

City of Placerville General Plan

Land use and planning is addressed within *Section I – Land Use; Section V – Natural, Cultural, and Scenic Resources; and Section VI – Health and Safety* of the City of Placerville General Plan (City of Placerville 2004).

The *Land Use* section contains the following goals that apply to the Project:

- **Goal F:** To provide for a land use pattern that protects and enhances Placerville's natural, open space, cultural, and scenic resources. Goals, policies, and implementation measures concerning natural, cultural, and scenic resources are contained in *Section V – Natural, Cultural, and Scenic Resources*.
- **Goal G:** To provide for a land use pattern that minimizes the exposure of residents and development to hazardous conditions and nuisances, such as geologic hazards, flooding, wildland fires, hazardous materials, and noise. Goals, policies, and implementation measures concerning health and safety are contained in the *Health and Safety* section.

The *Natural, Cultural, and Scenic Resources* section contains the following goal, policies, and implementation program that apply to the Project:

- **Goal B:** To prevent the premature conversion of agricultural lands and to protect the soil resources of the Placerville area.
 - **Policy 1:** The City of Placerville shall preserve, to the maximum extent possible, those soils most suitable for intensive agricultural production and encourage their continued use for agricultural purposes.

- **Policy 4:** The City of Placerville shall site and condition approvals of developments in areas of steep slopes and with erosive soils to minimize the need for grading and shall require reseeding and landscaping of disturbed areas, matting of steep cut slopes, and construction of retention basins.
- **Policy 5:** The City of Placerville shall require stockpiling of topsoil and construction sites for replacement following construction.
- **Implementation Program 3:** The City of Placerville shall prepare and adopt a grading and erosion and sediment control ordinance.

The *Health and Safety* section contains the following goal, policies, and implementation programs that apply to the Project:

- **Goal A:** To prevent loss of lives, injury and property damage due to geological hazards.
 - **Policy 2:** The City of Placerville shall require the following information and plans to be submitted for all projects subject to discretionary review by the City of Placerville in areas of moderate or high slope instability and areas with identified soil instability problems.
 - Engineering geologic report
 - Soils and foundation engineering report
 - Grading, erosion, and sediment control plan
 - Plan review letter evidencing review of all proposed development by a qualified engineering geologist
 - As-built construction report, including building plans, explanation and discussion of any deviations from the approved grading plan, the location and results of field tests, results of laboratory tests, and a statement that the work was performed under the supervision of and in accordance with recommendations of the engineering geologist and/or soils engineer
 - Signature of an engineering geologist certified by the State of California and/or a soils engineer registered in the State of California.
 - **Policy 3:** The City of Placerville shall ensure that both public and private developments in areas with significant identified geological hazards are sited to minimize the exposure of structures and improvements to damage resulting from geological hazards and to minimize the aggravation of off-site geological hazards.
 - **Policy 5:** The suitability of soil and/or rock formations should be one of the prime considerations for determining the type and intensity of development permitted.
- **Implementation Program 1:** The City of Placerville shall prepare, maintain, and regularly update an Index to Geological Reports which shall include reports prepared for both public and private projects.

- **Implementation Program 2:** The City of Placerville shall maintain an official Geological Map showing basic geology and the location of geological hazards. The Geological Map shall be regularly updated on the basis of geological reports prepared and filed in connection with development projects and water well logs and subsurface information developed in connection with public projects.

City of Placerville City Code

Title 10, Zoning Ordinance, establishes certain regulations on land and structures in order to protect and promote the health, safety, and welfare of the public, and ensure the orderly development of the City. The purpose of this title, among other further and more specific purposes, is to preserve and enhance the quality of the human environment, to promote the most desirable use of land, to conserve property values, to strengthen the economic base of the City of Placerville, and to safeguard the public from future undue expenditures, all of which are in accordance with, and in implementation of, the General Plan of the City.

City of South Lake Tahoe General Plan

Land use and planning is addressed within the *Land Use and Community Design Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Land Use and Community Design Element* contains the following goals and policies that apply to the Project:

- **Goal LU-8:** To enhance and unify the visual quality of South Lake Tahoe.
 - **Policy LU-8.7: Scenic Quality of New Projects.** The City shall ensure that new projects improve, enhance, and protect the scenic quality of South Lake Tahoe’s built and natural environments.
- **Goal LU-11:** To ensure the fair treatment of all visitors and residents, regardless of race, culture, and income with respect to land use and environmental decisions.
 - **Policy LU-11.3: Equitable Distribution of New Public Facilities and Services.** The City shall plan for the equitable distribution and use of new and upgraded public facilities and services that increase and enhance the entire community’s quality of life.

City of South Lake Tahoe City Code

Chapter 6.10, *Land Use Development Standards*, implements Citywide design standards to ensure that the design elements of new, remodeled and rehabilitated development are compatible with the scenic, community and recreation values described in the General Plan.

Chapter 6.55, *Plan Area Statements and Other Land Use Regulations*, establishes plan area statements and other land use regulations to promote and protect the public health, safety, peace, comfort, convenience, general welfare and environment, natural and manmade. As set forth in the City of South Lake Tahoe General Plan, the plan area statements provide detailed plans and policies for specific areas of the city. The plan area’s written text and maps, as well as the other land use regulation’s written text, provide specific land use policies and regulations for a specific planning area. Each planning area is depicted on the plan area maps.

4.11.1.2 Existing Conditions

Land Uses

According to the El Dorado County General Plan Draft Environmental Impact Report (EIR), prepared in 2003, the County encompasses approximately 1,145,385 acres of land, and excluding the waters of Lake Tahoe and Folsom Lake, the County encompasses 1,110,103 acres of land. Of this, approximately 46 percent of the land is in public ownership and 54 percent is privately owned. Only 196,355 acres (approximately 17 percent of land in the County) have been developed, with the vast majority of this being residential units. Agricultural lands and forestlands make up a large percentage of the undeveloped lands in the County. Forestlands occupy 636,000 acres (55 percent of the County), with 377,000 acres being federally controlled timberland in the Eldorado and Tahoe National Forests and 259,000 acres in private production. In 1997, the County had 153,472 acres of agricultural land, including farmland and grazing land (approximately 13 percent of the County) (County 2003).

Non-jurisdictional lands are an important factor in land use planning because such a large portion of the County is not subject to the County's land use planning decisions. A total of 531,924 acres (46 percent of the land) is regulated or owned by entities that are not under the planning jurisdiction of the County. The largest non-jurisdictional landowners are the federal government (U.S. Forest Service and Bureau of Land Management) and the State of California (Department of Parks and Recreation and University of California). The incorporated cities of Placerville and South Lake Tahoe are also considered non-jurisdictional lands and serve as the planning authority within their respective city boundaries. The Shingle Springs Rancheria is owned by the Shingle Springs Band of Miwok Indians and acts under federal law as a sovereign nation (County 2003).

Development Patterns

Land use and development patterns in the County are generally influenced by the physical environment. The most important physical features affecting development are the Sierra Nevada Mountain Range, U.S. Highway 50 (U.S. 50), areas of the County dominated by forestland, and Lake Tahoe. The Sierra Nevada Mountain Range divides El Dorado County into two distinct topographic areas—the western slope and Lake Tahoe Basin. The western slope extends from the Sacramento County line on the west to the summit of the Sierra Nevada on the east and contains most of the developed land in the County. Development on the western slope is concentrated near the western County line and along U.S. 50, which bisects El Dorado County, traveling east-west from Sacramento County through the City of Placerville to the California/Nevada border just south of Lake Tahoe. Historically, development in the County has closely followed this route, with the densest development in the western portion of the County. The County's two incorporated cities, the City of Placerville and City of South Lake Tahoe, as well as the major unincorporated towns of El Dorado Hills, Cameron Park, Shingle Springs, and Pollock Pines are located along this corridor.

One reason for the clustering of development in the western portion of the County is the vast area of forestland that covers much of the eastern two-thirds of the County. Generally, the density of residential and commercial development gradually decreases and the amount of open space (agricultural fields and forestland) increases heading east from the foothills to the Sierra Nevada summit. Most of the forestland in the Eldorado National Forest is administered by the U.S. Forest Service (USFS); other areas are privately owned commercial timberland. Rural towns and individual residences are scattered throughout these forested areas.

The Lake Tahoe Basin extends from the eastern side of the Sierra Nevada to the California/Nevada border. This mountainous area is characterized physically by rugged and steep terrain. The Lake Tahoe area occupies a unique position with regard to regional land use and economics. The lake is accessed from the western slope primarily by U.S. 50; State Route (SR) 89 provides the major access route from U.S. 50 to the westerly area of the lake, north to Placer County and south to Alpine County.

Outside the U.S. 50 corridor, development on the western slope of the County follows the other two main highways: SR 49 and SR 193. SR 49 transects the County from north to south and connects many of the original boom towns founded during the California Gold Rush of 1848. This route is a prime tourist destination, and the towns of Cool, Pilot Hill, Coloma, Lotus, Placerville, Diamond Springs, and El Dorado promote the mining heritage of the region with museums, historic districts, and commercial areas. SR 193 transects the northern part of El Dorado County from SR 49 to Greenwood and Georgetown, then turns south through Kelsey and into the City of Placerville (County 2003).

4.11.2 Significance Thresholds

According to Appendix G of the State CEQA Guidelines, the proposed Project would have a significant impact associated with land use and planning if the Project would:

1. Physically divide an established community; or
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.11.3 Impact Analysis

LUP-1 The proposed project would not physically divide an established community.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public rights-of-way (ROW). However, broadband infrastructure could also be constructed on private disturbed land and federal land and could connect to existing conduit or utility poles located within public or private utility easements. It is likely that the areas in which individual fiber projects would be constructed have been previously disturbed by prior utility work.

The proposed Project would expand access to fiber optic broadband technology and connect numerous communities in unincorporated El Dorado County and incorporated cities of Placerville and South Lake Tahoe. Implementation of the Project would help attract individual broadband infrastructure investors to bring broadband infrastructure and reliable connectivity to the County for increasing health and safety factors, as well as for economic and quality of life reasons. The proposed Project would not result in the development of any new major roadways or physical features or alter existing roadways through existing residential neighborhoods or other communities. Although some temporary construction-related traffic disturbances could occur, the proposed Project would not permanently divide an established community. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

LUP-2 The proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The proposed Project area includes the unincorporated areas of the County and incorporated cities of Placerville and South Lake Tahoe; as such, there are various general plan land use designations and zoning designations within the Project area. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' right-of-way. Broadband infrastructure could also be constructed on private and federal lands. Public and private roads are currently designated in the cities and County's general plans, zoning codes, and ordinances to accommodate utility infrastructure. Although the exact alignment of future broadband infrastructure is currently unknown at this time, individual fiber projects would be planned based on such considerations as construction feasibility, local demand, and locations of sensitive environmental resources.

Prior to issuance of all applicable permits outlined in Section 3.6, *Potential Permits and Approvals Required*, individual fiber projects would be required to demonstrate compliance with all applicable laws, regulations, policies, and ordinances. Therefore, the proposed Project would not conflict with any land use plan, policy, or regulation, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

4.11.4 Cumulative Impacts**LUP-3 The proposed project would not result in a significant cumulative impact with respect to land use and planning.**

Cumulative impacts would occur when the proposed Project, in combination with other transportation projects in El Dorado County, would directly or indirectly physically divide an established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. This analysis of cumulative impacts is based on impacts of the proposed Project and the other cumulative transportation projects in the County. As discussed above under Impact LUP-1 and LUP-2, the proposed project would have a less than significant impact on land use and planning.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Each cumulative project, including the proposed Project, would be subject to the appropriate land use consistency regulations and restrictions of the land use agency controlling the land. The land entitlement and CEQA/National Environmental Policy Act (NEPA) processes that are conducted for each cumulative project would ensure that each project is consistent with applicable land use plans and policies. Therefore, no cumulatively considerable impact associated with land use plans and/or policies would occur with approval of the Project.

Significance without Mitigation: Less than significant impact.

4.11.5 References

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4.12 MINERAL RESOURCES

This section describes the regulatory framework and existing conditions related to mineral resources and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on mineral resources were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to mineral resources.

4.12.1 Environmental Setting

4.12.1.1 Regulatory Framework

This section describes federal, State, and local environmental laws and policies that are relevant to the CEQA review process for mineral resources. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Portions of El Dorado County are under federal management (including areas with split-estate surface/mineral resource ownership) and associated with federal regulations are applicable to these areas. Specifically, federal regulations on mineral resources are applicable to areas under the jurisdiction of the Bureau of Land Management (BLM) and U.S. Forest Service (USFS). Most areas under military and National Park Service jurisdiction are closed to mineral entry and operation, with the exception of "grandfathered" or split-estate sites. Federal mining regulations include broad-based legislation such as the General Mining Act of 1872 (as amended, 42nd U.S. Congress, Sess. 2, Ch. 152, 17 Stat. 91-96), and the Federal Land Policy and Management Act of 1976 (as amended, Public Law 94-579). These Acts provide guidance for procuring rights to the following three basic classes of minerals on public lands: (1) locatable minerals, such as gold, silver and other "hard rock" mineral types; (2) leasable minerals, such as oil & gas and geothermal resources; and (3) salable minerals, such as aggregate and volcanic materials.

The noted Acts, as well as related BLM and USFS guidelines and policies, also provide direction on related mineral exploration, production, and processing activities. Specifically, these include applicable federal land use and environmental requirements such as the Code of Federal Regulations (CFR) Title 43, Subpart 3809 and National Environmental Policy Act (NEPA). The noted legislative and regulatory criteria also include guidelines for surface rights related to access, excavation and other land use considerations associated with mineral exploration and development. Under these guidelines, the rights to use associated surface areas to support mineral activities can vary substantially depending on factors such as the location and type of operation and the date of associated mineral entries. For example, certain older (and "grandfathered") mining claims under the 1872 Mining Act encompass exclusive surface rights for mineral activities, while leases for some mineral types (e.g., oil and gas) may preclude surface entry entirely, and require alternative recovery methods (e.g., directional drilling) in applicable locations such as sensitive habitats or cultural resource areas.

State Regulations

California Surface Mining and Reclamation Act of 1975

The principal legislation addressing mineral resources in California is the Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code [PRC] Sections 2710-2719), which was enacted in response to land use conflicts between urban growth and essential mineral production. The stated purpose of SMARA is to provide a comprehensive surface mining and reclamation policy that will encourage the production and conservation of mineral resources while ensuring that adverse environmental effects of mining are prevented or minimized; to ensure that mined lands are reclaimed and residual hazards to public health and safety are eliminated; and to consider recreation, watershed, wildlife, aesthetic, and other related values. SMARA governs the use and conservation of a wide variety of mineral resources, although some resources and activities are exempt from its provisions, including excavation and grading conducted for farming, construction, or recovery from flooding or other natural disasters.

SMARA provides for the evaluation of an area's mineral resources using a system of Mineral Resource Zone (MRZ) classifications that reflect the known or inferred presence and significance of a given mineral resource. The MRZ classifications are based on available geologic information including geologic mapping and other information on surface exposures, drilling records, and mine data, as well as socioeconomic factors such as market conditions and urban development patterns. The MRZ classifications are defined as follows:

- MRZ 1 – areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ 2 – areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.
- MRZ 3 – areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- MRZ 4 – areas where available information is inadequate for assignment into any other MRZ.

Although the State of California is responsible for identifying areas containing mineral resources, the county or city is responsible for SMARA implementation and enforcement by providing annual mining inspection reports and coordinating with the California Geologic Survey (CGS).

Mining activities that disturb more than 1 acre or involve excavation of at least 1,000 cubic yards of material require a SMARA permit from the lead agency, which is the county, city, or board that is responsible for ensuring that adverse environmental effects of mining are prevented or minimized. The lead agency establishes its own local regulations and requires a mining applicant to obtain a surface mining permit, submit a reclamation plan, and provide financial assurances pursuant to SMARA. Certain land-disturbing activities do not require a permit, such as excavation related to farming, grading related to restoring the site of a natural disaster, and grading related to construction.

Local Regulations

El Dorado County General Plan

Mineral resources are addressed within the *Conservation and Open Space Element* of the County General Plan. The *Conservation and Open Space Element* contains the following goals, objectives, policies, and implementation measure that apply to the Project (County 2017):

- **Goal 7.2: Mineral Resources.** Conservation of the County’s significant mineral deposits.
 - **Objective 7.2.2: Protection from Development.** Protection of important mineral resources from incompatible development.
 - **Policy 7.2.2.1:** The minimum parcel size within, or adjacent to, areas subject to the -MR overlay shall be twenty (20) acres unless the applicant can demonstrate to the approving authority that there are no economically significant mineral deposits on or adjacent to the project site and that the proposed project will have no adverse effect on existing or potential mining operations. The minimum parcel size adjacent to active mining operations which are outside of the -MR overlay shall also be twenty (20) acres.
 - **Policy 7.2.2.3:** The County shall require that new non-mining land uses adjacent to existing mining operations be designed to provide a buffer sufficient to protect the mining operation between the new development and the mining operation(s).
- **Implementation Measure CO-A:** Review the Zoning Ordinance (Title 17 of the El Dorado County Code) to identify revisions that accomplish the following:
 - D. Develop buffer standards for new non-mining land uses next to existing mining operations. [Policy 7.2.2.3]

City of Placerville General Plan

Mineral Resources are addressed within *Section V – Natural, Cultural, and Scenic Resources* of the City of Placerville General Plan (City of Placerville 2004). The *Natural, Cultural, and Scenic Resources* section contains the following goal and policy that apply to the Project:

- **Goal C:** To encourage continued mining activity in the Placerville area while ensuring such operations do not have a significant adverse effect on the natural environment and are not disruptive of the community social values.
 - **Policy 1:** The City of Placerville shall promote the protection and conservation of significant mineral deposits in the Placerville area, as classified by the State Geologist and designated by the State Mining and Geology Board and require buffering around mining operations to prevent encroachment by incompatible uses.

4.12.1.2 Existing Conditions

Geologic Setting

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 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 found in this area.

Mineral Resources

Mineral resources are usually mineral derivatives but can include geothermal and natural gas deposits. Because mineral resources can take millions of years to replenish naturally after extraction, they are considered “nonrenewable” resources. El Dorado County contains a wide variety of mineral resources. Both the United States Geological Survey (USGS) and CGS have evaluated the potential locations and production capacity of various types of extractive resources throughout the county. Metallic mineral deposits, gold in particular, are considered the most significant extractive mineral resource and the 1849 California “Gold Rush” originated from gold discovered in El Dorado County. Other metallic minerals found in the County include silver, copper, nickel, chromite, zinc, tungsten, mercury, titanium, platinum, and iron. Nonmetallic mineral resources include building stone, limestone, slate, clay, marble, soapstone, sand, and gravel (County 2003).

Mining Sites and Operations

Mining operations are regulated through the County’s permitting process. Historically, there have been numerous mining operations throughout El Dorado County. According to the California Department of Conservation (DOC) Division of Mine Reclamation, there are currently ten mines in El Dorado County (DOC 2024). The County considers areas classified as MRZ-2a or MRZ-2b within the County as important mineral resource areas. The majority of the County’s important mineral resource deposits are concentrated in the western third of the County (County 2003).

4.12.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact associated with mineral resources if the Project would:

1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; and
2. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

4.12.3 Impact Analysis

MIN-1 The proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.

MIN-2 The proposed project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Implementation of the Project would involve installation of fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. However, the majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and could connect to existing conduit or utility poles located within public or private utility easements. Staging areas are planned to be established in typical roadway cross-sections. If road constraints prevent locating staging areas along roadways, alternative areas such as previously disturbed private or public land may be used. The exact locations of staging areas and equipment lay-down areas would be determined during the final construction plans for each individual fiber project.

There are currently 10 mines located within the County. The County identifies several areas of important mineral resource areas within the western slope of the County, which are classified as MRZ-2a or MRZ-2b. The majority of the County's important mineral resource deposits are concentrated in the western third of the County (County 2003). As individual fiber projects would be primarily constructed within previously disturbed areas along the typical roadway cross-section, Caltrans ROW, or disturbed areas within private or federal lands, the proposed Project would not interfere with the existing mines or mineral land classification studies. Therefore, the impact would be less than significant for Impact MIN-1 and MIN-2.

Significance without Mitigation: Less than significant impact.

4.12.4 Cumulative Impacts

MIN-3 The proposed project would not result in a significant cumulative impact with respect to mineral resources.

Cumulative impacts would occur when the proposed Project, in combination with other projects in El Dorado County, would result in the loss of a known mineral resource or a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. The geographic context for the analysis of cumulative impacts to mineral resources is the extent of the County, and immediately adjacent areas to the extent of the resource. As discussed above under Impact MIN-1 and MIN-2, implementation of the proposed Project would result in a less than significant impact on mineral resources.

The analysis of cumulative impacts is based on impacts of the proposed Project and other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in

Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Similar to the proposed Project, the vast majority of these transportation projects are anticipated to occur within previously disturbed and/or developed areas. As discussed above, implementation of the proposed Project would not interfere with the existing mines or mineral classification studies, and therefore, the impact would be less than cumulatively considerable.

Significance without Mitigation: Less than significant impact.

4.12.5 References

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4.13 NOISE

This section describes the regulatory framework and existing conditions related to noise, evaluates the potential impacts that could occur as a result of implementation of the proposed Project, and details mitigation measures needed to reduce significant impacts, as necessary. The potential effects on noise were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No environmental issues were identified or raised during the public scoping period that pertained to noise.

4.13.1 Environmental Setting

4.13.1.1 Noise Metrics

All noise-level and sound-level values presented herein are expressed in terms of decibels (dB), with A weighting, abbreviated “dBA,” to approximate the hearing sensitivity of humans. Time averaged noise levels of one hour are expressed by the symbol “ L_{EQ} ” unless a different time period is specified. Maximum noise levels are expressed by the symbol “ L_{MAX} .” The Community Noise Equivalent Level (CNEL) is a 24-hour average, where noise levels during the evening hours from 7:00 p.m. to 10:00 p.m. have an added 5 dBA weighting, and sound levels during the nighttime hours from 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. This is similar to the Day Night sound level (L_{DN}), which is a 24-hour average with an added 10 dBA weighting on the same nighttime hours but no added weighting on the evening hours.

Because decibels are logarithmic units, sound pressure level (SPL) cannot be added or subtracted through standard arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than from one source under the same conditions. For example, if one automobile produces an SPL of 70 dBA when it passes an observer, two cars passing simultaneously would not produce 140 dBA—rather, they would combine to produce 73 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dBA louder than one source.

Under controlled conditions in an acoustic laboratory, the trained, healthy human ear is able to discern 1 dBA changes in sound levels, when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000 Hertz [Hz]–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dBA are generally not perceptible. It is widely accepted, however, that people begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dBA increase is generally perceived as a distinctly noticeable increase, and a 10 dBA increase is generally perceived as a doubling of loudness.

4.13.1.2 Vibration Metrics

Groundborne vibration consists of rapidly fluctuating motions or waves transmitted through the ground with an average motion of zero. Sources of groundborne vibrations include natural phenomena and anthropogenic causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Peak particle velocity (PPV) is commonly used to quantify vibration amplitude. The PPV, with units of inches per second (in/sec), is defined as the maximum instantaneous positive or negative peak of the vibration wave.

4.13.1.3 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for noise and vibration. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

U.S. Environmental Protection Agency Recommendations

The U.S. Environmental Protection Agency (USEPA) provides guidance in Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety (NTIS 550\9-74-004, EPA, Washington, D.C., March 1974), which is commonly referenced as the "Levels Document." The Levels Document establishes an L_{DN} of 55 dBA as the requisite noise level, with an adequate margin of safety for areas of outdoor uses, including residential and recreational areas. This document does not rely upon USEPA regulations or standards, but it identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations. The Levels Document is intended to "provide State and local governments as well as the Federal government and the private sector with an informational point of departure for the purpose of decision-making." The agency is careful to stress that the recommendations contain a factor of safety and do not consider technical or economic feasibility issues and therefore should not be construed as standards or regulations.

State Regulations

California Noise Control Act

The California Noise Control Act is a section within the California Health and Safety Code that describes excessive noise as a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Department of Transportation

The California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* contains guidelines and recommendations for predicting and assessing the vibration impacts of roadway construction projects, including predicting and assessing the ground-borne vibrations from commonly used construction equipment. The manual contains guidelines for determining thresholds for damage to structures from construction equipment vibrations based on the age and/or construction type of the structures near construction activity (Caltrans 2020).

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of El Dorado County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapter of the TRPA Code of Ordinances apply to the Project:

Chapter 68, *Noise Limitations*, implements the Goals and Policies, Land Use Element, Noise sub-element, and attain and maintain the TRPA noise thresholds. The provisions of this chapter apply to single noise events from aircraft, watercraft, motor vehicles, motorcycles, off-road vehicles, and over-snow vehicles. The provisions also apply to community noise levels in the Tahoe region.

TRPA Regional Plan

Noise is addressed within the Noise sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b). The Noise sub-element contains the following goal and policy that apply to the Project:

- **Goal N-2:** Community noise equivalent levels shall be attained and maintained. CNEL thresholds were adopted to reduce the annoyance associated with cumulative noise events on people and wildlife. In the Region, the main sources of noise are attributed to the major transportation corridors and the airport. Therefore, these policies are directed towards reducing the transmission of noise from those sources. The CNEL thresholds will be attained upon implementation of the following policies.
 - **Policy N-2.1:** Transmission of noise from the transportation corridors shall be reduced. The noise associated with the transportation corridors can be decreased by reducing the number of trips and by installing mitigation measures. Trip reduction will be accomplished by the transit improvements identified in the Transportation Element. Ordinances will establish specific site design criteria for projects to help reduce the transmission of noise from the transportation corridors. The design criteria will also be incorporated into the water quality and transportation improvement programs. The mitigation measures may include setbacks, earth berms, and barriers.

Local Regulations

Airport Land Use Commissions in El Dorado County

In 1967, the State of California amended the State Aeronautics Act (Pub. Util. Code, § 21670 et seq.) by adding a requirement for the establishment of airport land use commissions (ALUCs) in counties with one or more airports serving the general public. In 1970, the legislature further amended the State Aeronautics Act requiring each ALUC to develop airport land use compatibility plans (ALUCPs) for areas around public-use and military airports in their jurisdiction. ALUCs are charged with assisting local agencies in ensuring compatible land uses in the vicinity of all new airports or heliports and existing airports or heliports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses (Pub. Util. Code, § 21674). They are also charged with coordinating planning at the State, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare (Pub. Util. Code, § 21674(b)); to prepare and adopt airport land use plans; and to review and make recommendations concerning specified plans, regulations and other actions of local agencies and airport operators.

Although standards established by the Federal Aviation Administration (FAA) form the basis of safety and noise restrictions, each ALUC is responsible for adopting and tailoring these standards to the specific airport and for enforcing them. The ALUCP is the primary document used by ALUC to promote compatibility between an airport and the surrounding area. More specifically, the ALUCP is regulatory in nature and should act as a guide for the ALUC and local jurisdictions in safeguarding the general welfare of the public as the airport and the area surrounding the airport grows. The ALUCP also serves as a tool for the ALUC in fulfilling its duty to review airport and land use development proposals within the airport influence area. The ALUCP is the key to implementation of ALUC policies related to proposed land development in the vicinity of the airport. The ALUCP provides the standards, criteria, and policies on which the compatibility of proposed local land use policy actions are determined. The ALUCP also establishes the planning boundaries around airport that define noise, safety, airspace protection, and overflight notification, for policy implementation.

El Dorado County has four airports: Cameron Airpark, Georgetown Airport, Placerville Airport and Lake Tahoe Airport. The El Dorado County Transportation Commission (EDCTC) is the designated ALUC for the three airports within the west slope of the County, Cameron Airpark, Georgetown Airport, and Placerville Airport, and maintains an individual ALUCP for each airport (EDCTC 2012). The South Lake Tahoe ALUC is the designated ALUC for Lake Tahoe Airport and maintains the Lake Tahoe ALUCP. The EDCTC and South Lake Tahoe ALUCs provide technical and advisory support to the County's airports, and serve four primary functions under the State Aeronautics Act of the California Public Utilities Code commencing with Section 21670 (Division 9, part 1, Chapter 4, Article 3.5):

- Develop and adopt land use standards to minimize public exposure to safety hazards and excessive levels of noise;
- Prevent encroachment of incompatible land uses around public-use airports;
- Prepare an Airport Land Use Compatibility Plan for the area around each public use airport defining compatible land uses for safety, density, height, and noise; and
- Perform land use consistency determinations for proposed projects within each ALUCP.

El Dorado County Code

Section 130.37.060, *Noise Standards*, establishes both transportation and non-transportation noise level standards for noise-sensitive receptors. The purpose of the Noise Ordinance is to implement the noise level standards identified in the El Dorado County General Plan.

Pursuant to Section 130.37.020, *Exemptions*, sound or noise emanating from construction activities during daylight hours, is exempt from Section 130.67.060 of the El Dorado County Code, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order.

Section 9.16.040, *Loud and raucous noises—Definitions*, defines the following:

Loud and raucous noise means:

1. Any noise made by the motor of any automobile, truck, tractor, motorcycle, or aircraft of any kind not reasonably required in the operation thereof under the circumstances and shall include, but not be limited to, backfiring, motor racing, and the buzzing by airplanes;
2. The sound of the discharge of any explosive except by or with the permission of any appropriate State or local licensing agency;
3. The human voice or any record or recording thereof when amplified by any device whether electrical or mechanical or otherwise to such an extent as to cause it to unreasonably carry on to public or private property or to be heard by others using the public highways, public thoroughfares, or public buildings; 4. Any sound not included in the foregoing which is of such volume, intensity, or carrying power as to interfere with the peace and quiet of persons upon public or private property or other users of the public highways, thoroughfares, and buildings.

Section 9.16.050, *Loud and raucous noises—Prohibited*, notes that except as otherwise provided in this chapter, it is unlawful for any person to willfully make, emit, or transmit or cause to be made, emitted, or transmitted any loud and raucous noise upon or from any public highway or public thoroughfare or from any aircraft of any kind whatsoever, or from any public or private property to such an extent that it unreasonably interferes with the peace and quiet of another's private property.

El Dorado County General Plan

Noise is addressed within the *Public Health, Safety, and Noise Element* of the County General Plan. The *Public Health, Safety, and Noise Element* contains the following goal, objectives, and policies that apply to the Project (County 2019):

- **Goal 6.5: Acceptable Noise Levels.** Ensure that County residents are not subjected to noise beyond acceptable levels.
 - **Objective 6.5.1: Protection of Noise Sensitive Development.** 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.

- **Policy 6.5.1.2:** Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 (see Table 4.13-2) at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.
- **Policy 6.5.1.3:** Where noise mitigation measures are required to achieve the standards of Tables 6-1 (see Table 4.13-1) and 6-2 (see Table 4.13-2), the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.
- **Policy 6.5.1.7:** Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 (see Table 4.13-2) for noise-sensitive uses.

Table 4.13-1
NOISE LEVEL STANDARDS FOR NOISE-SENSITIVE LAND USES AFFECTED BY TRANSPORTATION NOISE

Sensitive Receptor	Outdoor Activity Areas ¹	Interior Spaces	
	L _{DN} /C _{NEL} , dB	L _{DN} /C _{NEL} , 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: County 2019

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 dB L_{DN} shall be applied at the building facade, in addition to a 60 dB L_{DN} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{DN} shall be applied at a 100-foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{DN} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.

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} /C_{NEL} or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{DN} /C_{NEL} may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Table 4.13-2
NOISE LEVEL PERFORMANCE STANDARDS FOR NOISE-SENSITIVE LAND USES AFFECTED BY NON-TRANSPORTATION SOURCES

Noise Level Descriptor	Daytime (7 a.m. to 7 p.m.)		Evening (7 p.m. to 10 a.m.)		Nighttime (10 p.m. to 7 a.m.)	
	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions	Community/ Rural Centers	Rural Regions
Hourly L_{EQ} , dBA	55	50	50	45	45	40
Maximum Level, dBA	70	60	60	55	55	50

Source: County 2019

Notes: Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site. In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas, the exterior noise level standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing noise sensitive land use, defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

- **Policy 6.5.1.11:** The standards outlined in Tables 6-3, 6-4, and 6-5 (see Table 4.13-3) shall not apply to those activities associated with the 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. Further, the standards outlined in Tables 6-3, 6-4, and 6-5 (see Table 4.13-3) shall not apply to public projects to alleviate traffic congestion and safety hazards.
- **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:
 - Where existing or projected future traffic noise levels are less than 60 dBA LDN at the outdoor activity areas of residential uses, an increase of more than 5 dBA LDN caused by a new transportation noise source will be considered significant;
 - Where existing or projected future traffic noise levels range between 60 and 65 dBA LDN at the outdoor activity areas of residential uses, an increase of more than 3 dBA LDN caused by a new transportation noise source will be considered significant; and
 - Where existing or projected future traffic noise levels are greater than 65 dBA LDN at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA LDN caused by a new transportation noise will be considered significant.

- **Policy 6.5.1.13:** When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:
 - In areas in which ambient noise levels are in accordance with the standards in Table 6-2 (see Table 4.13-2), increases in ambient noise levels caused by new non-transportation noise sources that exceed 5 dBA shall be considered significant; and
 - In areas in which ambient noise levels are not in accordance with the standards in Table 6-2 (see Table 4.13-2), increases in ambient noise levels caused by new non transportation noise sources that exceed 3 dBA shall be considered significant;

Table 4.13-3
MAXIMUM ALLOWABLE NOISE EXPOSURE FOR NON-TRANSPORTATION NOISE SOURCES

Land Use Designation ¹	Time Period	Noise Level (dB)	
		Leq	LMAX
Community Regions and Adopted Plan Areas – Construction Noise			
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
Rural Centers – Construction Noise			
All 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.	40	55
Commercial, Recreation, and Public Facilities (C, R&D, PF)	7 a.m. – 7 p.m.	65	75
	7 p.m. – 7 a.m.	60	70
Industrial (I)	Any time	70	80
Open Space	7 a.m. – 7 p.m.	55	75
	7 p.m. – 7 a.m.	50	65
Rural Regions – Construction Noise			
All Residential (LDR)	7 a.m. – 7 p.m.	50	60
	7 p.m. – 10 p.m.	45	55
	10 p.m. – 7 a.m.	40	50
Commercial, Recreation, and Public Facilities (C, TR, PF)	7 a.m. – 7 p.m.	65	75
	7 p.m. – 7 a.m.	60	70
Rural Land, Natural Resources, Open Space, and Agricultural Lands (RR, NR, OS, AL)	7 a.m. – 7 p.m.	65	75
	7 p.m. – 7 a.m.	60	70

Source: County 2019

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.

- **Objective 6.5.2: Airport Noise Guidelines.** The County shall recognize the ALUCP for the Placerville Airport, the Cameron Airpark, and Georgetown Airport as the applicable guidelines for development within the Airport Noise Zones for these airports. Where there is a conflict between the County noise standards and the noise standards of the ALUCP, the standards of the ALUCP should take precedence.
 - **Policy 6.5.2.1:** All projects, including single-family residential, within the Airport Noise Zones of the Cameron Airpark, Georgetown, and Placerville airports shall be evaluated against the applicable policies in the ALUCP.

City of Placerville General Plan

Hazards and hazardous materials are addressed within *Section VI – Health and Safety* of the City of Placerville General Plan (City of Placerville 2004). The *Health and Safety* section contains the following goals, policies, and implementation program that apply to the Project:

- **Goal I:** To protect the residents of the City of Placerville from the harmful effects of exposure to excessive noise.
 - **Policy 1:** The City shall attempt, insofar as possible, to protect areas within the city where the present noise environment is considered acceptable.
 - **Policy 2:** Areas within the City of Placerville exposed to existing or projected exterior noise levels exceeding 60dB L_{DN} shall be designated as noise-impacted areas.
 - **Policy 3:** Areas within the City of Placerville shall be designated as noise-impacted if exposed to existing or projected exterior noise levels exceeding the performance standards in Table II-1 (see Table 13-4).

Table 4.13-4
NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AND DEVELOPMENTS

Category	Cumulative Number of Minutes in any One-Hour Time Period	Exterior Noise Level Standards, dBA	
		Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: City of Placerville 2004

Notes: Noise created by non-preempted noise sources associated with new projects or developments shall be controlled so as not to exceed the noise level standards set forth below as measured at any affected residential land use situated in either the incorporated or unincorporated areas of Placerville.

A preempted noise source is one that is regulated by the State or Federal Government at the source such as automobiles, railroads, and airports.

Each of the noise level standards specified above shall be reduced by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

- **Policy 14:** The use of solid barriers, earth mounds, and vegetation should be utilized as a means of screening noise sources from adjacent land uses.
- **Policy 15:** The City of Placerville shall encourage acoustically compatible land uses and require noise attenuation measures, when necessary, in the vicinity of the Placerville Airport. The City shall ensure that land use approvals in the City are consistent with the Placerville Airport Land Use Compatibility Plan.
- **Goal J:** To promote land use development surrounding the Placerville Airport that is compatible with noise, safety, airspace protection, overflight and other special characteristic policies and maps of the Placerville ALUCP.

City of South Lake Tahoe General Plan

Noise is addressed within the *Health and Safety Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Health and Safety Element* contains the following goal and policies that apply to the Project:

- **Goal HS-8:** To protect the City of South Lake Tahoe’s residents, workers, and visitors from the harmful and annoying effects of excessive exposure to noise.
 - **Policy HS-8.1: Annoying and Excessive Non-Transportation Noise Protection.** The City of South Lake Tahoe shall require all new non-transportation noise sources to not exceed the exterior noise level standards shown in Table HS-1 (See Table 4.13-5). These standards shall be measured immediately within the property line of parcels designated as noise sensitive uses.
 - **Policy HS-8.2: Annoying and Excessive Non-Transportation Noise Mitigation.** In instances where a noise-sensitive use is adversely affected by non-transportation noise levels in excess of standards shown in Table HS-1 (See Table 4.13-5), the City of South Lake Tahoe shall require appropriate mitigation to be incorporated into the project’s design in order to achieve the standards shown in Table HS-1, as measured immediately within the property line or within a designated outdoor activity area of the project (at the discretion of the Community Development Director).
 - **Policy HS-8.3: Overall Background Noise Mitigation.** The City of South Lake Tahoe shall not allow any project to increase the overall background noise levels at receiving land uses by three or more dB in instances when measured ambient noise levels exceed the standards contained within Table HS-1 (See Table 4.13-5).

Table 4.13-5
EXTERIOR NOISE LEVEL PERFORMANCE STANDARDS FOR NEW PROJECTS AFFECTED
BY OR INCLUDING NON-TRANSPORTATION NOISE SOURCES

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{EQ} , dB	55	45

Source: City of South Lake Tahoe 2011

¹ Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises (e.g., humming sounds, outdoor speaker systems). These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The City can impose noise level standards that are more restrictive than those specified above based on determination of existing low ambient noise levels.

Fixed noise sources which are typically of concern include, but are not limited to, the following: HVAC Systems, Cooling Towers/Evaporative Condensers, Pump Stations, Lift Stations, Emergency Generators, Boilers, Steam Valves, Steam Turbines, Generators, Fans, Air Compressors, Heavy Equipment, Conveyor Systems, Transformers, Pile Drivers, Grinders, Drill Rigs, Gas or Diesel Motors, Welders, Cutting Equipment, Outdoor Speakers, Blowers.

The types of uses which may typically produce the noise sources described above include but are not limited to: industrial facilities including pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

² For the purposes of this General Plan, transportation noise sources are defined as traffic on public roadways, railroad line operations, and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, loading docks, etc.

- **Policy HS-8.4: Annoying and Excessive Transportation Noise Protection.** The City of South Lake Tahoe shall not allow noise-sensitive land uses in areas exposed to existing or projected transportation noise levels that exceed the standards shown in Table HS-2 (See Table 4.13-6), unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels at or below those shown in Table HS-2.
- **Policy HS-8.5: New Transportation Noise Source Mitigation.** The City of South Lake Tahoe shall require the mitigation of new transportation noise sources to the levels shown in Table HS-2 (See Table 4.13-6) at all outdoor activity areas and interior spaces of existing noise-sensitive land uses.
- **Policy HS-8.6: Acoustical Analysis Preparation.** The City of South Lake Tahoe shall require an acoustical analysis as part of the environmental review process when noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding levels shown in Tables HS-1 and HS-2 (See Table 4.13-5 and Table 4.13-6), so noise mitigation may be included in the project design. All acoustical analysis shall:
 - A. Be the financial responsibility of the applicant;
 - B. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics;
 - C. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources; and

- D. Estimate existing and projected cumulative (20 year) noise levels in terms of L_{dn} or CNEL and/or the standards shown in Table HS-1 (See Table 4.13-5), and compare those levels to the policies in this section;
- E. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards in this section, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses;
- F. Estimate noise exposure after the prescribed mitigation measure(s) has been implemented; and
- G. Describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation measures.

Table 4.13-6
MAXIMUM ALLOWABLE NOISE EXPOSURE FROM TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Areas ¹ L_{DN} /CNEL, dB		Interior Spaces	
	Roadways	Railroads/Aircraft	L_{DN} /CNEL, dB	L_{EQ} , dB ²
Residential	60 ³	65 ⁵	45	-
Transient Lodging	65 ^{4,5}	65 ^{4,5}	45	-
Hospitals, Nursing Homes	60 ³	60 ³	45	-
Theaters, Auditoriums, Music Halls	-		-	35
Churches, Meeting Halls	60 ³	65 ⁵	-	40
Office Buildings	-	-	-	45
Schools, Libraries, Museums	-	-	-	45
Playgrounds, Neighborhood Parks	70	75	-	-

Source: City of South Lake Tahoe 2011

- ¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels on patios or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
- 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.
- ⁴ For hotels, motels, and other transient lodging facilities where outdoor activity areas such as pool areas are not included in the project design, only the interior noise level criterion will apply.
- ⁵ Where it is not possible to reduce noise in outdoor activity areas to 65 dB L_{DN} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 70 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 HS-8.8: Lake Tahoe Airport Comprehensive Land Use Plan Compliance.** The City of South Lake Tahoe shall ensure that all new projects located within the Lake Tahoe Airport environs comply with Lake Tahoe ACLUP.

4.13.1.4 Existing Conditions

Noise Sources

The ambient noise environment in El Dorado County is largely affected by stationary activities (e.g., commercial and industrial uses), aircraft operations, and traffic on major roadways and highways (County 2003). These sources of noise in the County are discussed below.

Stationary Sources

Stationary noise sources include industrial and commercial land uses. Many industrial processes produce noise, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by federal and State employee health and safety regulations (i.e., regulations of the Occupational Safety and Health Administration of the U.S. Department of Labor [OSHA] and the California Division of Occupational Safety and Health [Cal-OSHA]). Exterior noise levels that affect neighboring parcels are typically subject to local standards. Commercial, recreational, and public facility activities can also produce noise that may affect adjacent noise-sensitive land uses. These noise sources can be continuous or intermittent with noise-sensitive land uses and may contain tonal components that are annoying to individuals who live nearby. For instance, emergency-use sirens and backup alarms are often considered nuisance noise sources, but do not occur frequently enough to be considered incompatible with noise-sensitive land uses. Noise generation from fixed noise sources may vary based upon climate conditions, time of day, and existing ambient noise levels (County 2003).

Stationary noise sources are dispersed throughout the County and include quarry operations, lumber mills, schools/parks with sports fields, and industrial facilities. Some sources are located in urban settings and others, such as quarry operations, are sited in more rural locations. Noise-sensitive land uses (NSLUs) located in the vicinity of these stationary sources consist primarily of residential dwellings (County 2003).

Airports

Noise concerns typically associated with airports include increased levels of annoyance and interference with personal activities such as sleeping, conversing, relaxing, or watching television. While individual responses to noise can vary, various methods and noise descriptors have been developed to correlate aircraft noise levels with land use compatibility and community reaction. In accordance with federal and State regulations, airport noise exposure maps within California are depicted in terms of average annual CNEL contours. Because the CNEL noise metric is time-weighted to account for noise events that occur during the more noise-sensitive periods of the day, this metric is typically used for the analysis of land use compatibility with aircraft operations. Most federal and State regulations and policies establish the maximum acceptable limit for noise exposure at residential and other noise-sensitive land uses such as 65 dBA CNEL, within urbanized areas. For quieter, suburban settings, a maximum acceptable noise level of 55 dBA CNEL is typically considered more appropriate (County 2003).

Aircraft noise sources within the County are associated predominantly with aircraft based at public airports and, to a lesser extent, with noise at various private airstrips and heliports. Noise-sensitive receptors located in the vicinity of the airports consist primarily of residential dwellings (County 2003).

Roadway Traffic

Ambient noise levels in many portions of the County are defined primarily by traffic on major roadways, including but not limited to U.S. Highway 50 (U.S. 50) and State Routes (SRs) 49, 193, and 89 (County 2003). The areas surrounding travel corridors in the County are often characterized by hills. As a consequence, both the corridors and surrounding sensitive noise receptors are located at various heights, which may affect how traffic noise travels and how it is experienced at nearby sensitive receptors. Additionally, the speed limits on the travel corridors may frequently change due to vehicles needing to slow down around wide turns. Because vehicles may be regularly accelerating and decelerating, this can also be a factor that influences the level of traffic noise at sensitive receptors.

4.13.2 Significance Thresholds

The impact analysis provided below is based on the application of the following CEQA Guidelines Appendix G thresholds of significance, which indicate that a project would have a significant noise impact if it would result in:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Generation of excessive groundborne vibration or groundborne noise levels;
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

The significance of noise and vibration levels, or the increase in noise levels as a result of the project, are based on the following standards from the County General Plan or other agencies:

- **Temporary Construction Noise:** Per the El Dorado County General Plan Goal 6.5, project noise would be significant if daytime noise (between 7 a.m. and 7 p.m.) would exceed 70 dBA L_{MAX} in community areas and 60 dBA L_{MAX} in rural areas, if evening noise (between 7 p.m. and 10 p.m.) would exceed 60 dBA L_{MAX} in community areas and 55 dBA L_{MAX} in rural areas, and if nighttime noise (between 10 p.m. and 7 a.m.) would exceed 55 dBA L_{MAX} in community areas and 50 dBA L_{MAX} in rural areas at NSLU outdoor use areas or building facades.
 - Per the El Dorado County General Plan Policy 6.5.1.11 (see the regulatory framework discussion, above), construction activity which occurs between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m. and 5:00 p.m. on weekends, and on federally recognized holidays would be exempt from noise standards listed in Table 4.13-2.
- **Exterior Noise:**
 - Per the City of Placerville General Plan Goal I, areas within the City of Placerville shall be designated as noise-impacted if exposed to existing or projected exterior noise levels exceeding the performance standards in Table 4.13-4.

- Per the City of South Lake Tahoe General Plan Goal HS-8, the City of South Lake Tahoe shall require all new non-transportation noise sources to not exceed the exterior noise level standards shown in Table 4.13-5.
- **Ground borne Vibration:** Project construction vibration would be significant if vibration levels exceed the following criteria (Caltrans 2020):
 - A “severe” human response level of 0.4 inch per second PPV measured at any occupied building; or
 - A damage threshold of 0.3 inch per second PPV measured at any older residential building; or
 - A damage threshold of 0.08 inch per second PPV measured at any fragile historic building, ruin, or ancient monument.

4.13.3 Impact Analysis

NOI-1 The proposed project may result in a temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the County General Plan.

Construction Noise

Implementation of the proposed Project would result in a temporary or periodic increase in ambient noise levels related to construction equipment, activities, and vehicles. Noise impacts from construction activities occurring for each individual fiber project would be dependent on the type, location, and duration of the noise-generating construction activities, and the distance to noise sensitive land uses. The majority of the broadband infrastructure would be built within the typical roadway cross-section within the unincorporated areas of the County, the incorporated cities of Placerville and South Lake Tahoe, or the Caltrans’ public right-of-way (ROW). Implementation of the proposed Project would not result in the development of housing or generate increases in population in the program area. However, exact alignment of future broadband infrastructure is currently unknown at this time and would be planned based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources.

Construction noise from the development of individual fiber projects would be temporary and short term as construction occurs intermittently and varies depending on the nature or phase of construction (e.g., horizontal directional drilling, plowing, trenching, microtrenching, line installation, aerial stringing, and pavement repair). Construction equipment would vary by construction method, but the construction process could include operation of the following types of equipment: pickup/utility trucks, horizontal drill rigs, auger drill rigs, cranes, generators, excavators, backhoes, dozers, air compressors, trenchers, concrete saws, vibratory rollers, dump trucks, and Man Lifts. Noise generated from these pieces of equipment would be temporary and intermittent as typical use is characterized by short periods of full power operation followed by extended periods of lower power, idling, or powered-off conditions. The noise level of construction equipment anticipated to be used at project sites, from the Federal Highway Administration’s (FHWA’s) Roadway Construction Noise Model (RCNM) are shown below in Table 4.13-7.

Table 4.13-7
REFERENCE NOISE LEVELS FROM TYPICAL CONSTRUCTION EQUIPMENT

Equipment	Typical Noise Level 50 ft from Source, dB
Horizontal Directional Drilling	
Boring Jack Power Unit	80.0
Horizontal Boring Jack	76.0
Cranes	72.6
Generator Sets	77.6
Excavators	76.7
Tractors/Loaders/Backhoes	73.6
Plowing	
Dozer	77.7
Line Installation	
Air Compressors	73.7
Generator Sets	77.6
Aerial Stringing	
Bore/Drill Rigs	77.4
Cranes	72.6
Tractors/Loaders/Backhoes	73.6
Microtrenching	
Trenchers	77.3
Tractors/Loaders/Backhoes	73.6
Trenching	
Concrete/Industrial Saws	82.6
Excavators	
Tractors/Loaders/Backhoes	73.6

Source: FHWA 2008

Construction activities would be limited to the less noise-sensitive hours (e.g., daytime) from 7:00 a.m. to 7:00 p.m., Monday through Friday, from 8:00 a.m. and 5:00 p.m. on weekends, and federally recognized holidays, and therefore would be exempt from noise standards consistent with the County Maximum Allowable Noise Exposure For Non-Transportation Noise Sources In Community Regions And Adopted Plan Areas—Construction Noise (County 2019). Mitigation Measure NOI-1 would be implemented to restrict the Project construction activity hours. With implementation of Mitigation Measure NOI-1, the Project would not exceed the applicable County construction noise standards, and the impact would be less than significant.

Operation Noise

Some remote sites could include the use of generators to provide power for emergency communications during power outages. Specific types of generators that would be installed are unknown. A typical backup generator for a communications site is a Polar Power 15-kilowatt diesel- or natural gas-powered generator housed in an enclosure which has a rated sound level of 66.2 dBA measured at 23 feet. Noise from routine maintenance and testing of any project emergency generators would be subject to County Ordinance Chapter 9.16, which prohibits loud or raucous noises which unreasonably interfere with the peace and quiet of another's private property. Emergency generators are typically run for maintenance and testing for 15 to 30 minutes during daytime hours, several times per month. A generator producing 66.2 dBA for 30 minutes in one hour would result in 63.2 dBA L_{eq} at a distance of 23 feet. Per the El

Dorado County General Plan Goal 6.5, project noise would be significant if daytime noise (between 7 a.m. and 7 p.m.) would exceed 55 dBA L_{EQ} in community areas and 50 dBA L_{EQ} in rural areas, measured at NSLU outdoor use areas or building facades.

Therefore, project emergency backup generators located within 60 feet of a NSLU in a community area or within 105 feet of an NSLU in a rural area would result in stationary source noise exceeding the daytime County standard of 55 dBA L_{EQ} for community areas and 50 dBA L_{EQ} for rural areas. Mitigation Measure NOI-2 would require emergency backup generators to be located away from any NSLU or provide sound reduction measures to reduce noise from generators. With implementation of Mitigation Measure NOI-2, the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure NOI-1: Construction Hours

Construction activities shall not occur outside the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, or outside the hours of 8:00 a.m. and 5:00 p.m. on weekends, or at all on federally recognized holidays. The project applicant or construction contractor shall post a publicly visible sign at the entrance to the individual fiber project site listing the allowable construction hours and the contact information, including telephone numbers, to report noise violations to the County and the contractor.

Mitigation Measure NOI-2: Backup Generator Noise Control

Prior to approving individual fiber projects that require an emergency back generator, the County shall verify project plans including the following:

- Where feasible, emergency backup generators shall be installed no closer than 60 feet from any noise sensitive land use (NSLU; e.g., residences, schools, hospitals, convalescent homes, churches, libraries) in a community area, and no closer than 105 feet from any NSLU in a rural area. If it is not feasible to locate emergency generators 60 feet or more from NSLU in community areas or 105 feet or more from NSLUs in rural areas, the project proponent shall incorporate noise attenuating features (e.g., generator sound enclosures, noise barriers) into the equipment installation sufficient to reduce generator noise levels to 50 dBA L_{EQ} or less measured at outdoor use areas or building edges of the closest NSLU. Noise levels at NSLUs shall be verified by a qualified acoustical professional.

Significance with Mitigation: Less than significant impact.

NOI-2 The proposed project may result in the generation of excessive groundborne vibration levels.

Construction Groundborne Vibration

Project construction activities would not require activities known to generate excessive ground-borne vibration, such as pile driving or blasting. A possible source of vibration during general Project construction activities would be a vibratory roller used for gravel or pavement compaction. A large vibratory roller can create approximately 0.210 inch per second PPV at 25 feet (Caltrans 2020). Specific locations where vibratory rollers could be used during Project construction have not been identified. However, construction vibration impacts would be potentially significant if a vibratory roller were used:

within 15 feet of an occupied building (exceeding 0.4 inch per second PPV); within 18 feet of an older residential building (exceeding 0.3 inch per second PPV); or within 60 feet of a fragile historical building, ruin, or ancient monument (exceeding 0.08 inch per second PPV).¹ Mitigation Measure NOI-3 would require vibratory rollers to be used in static mode only (no vibrations) in proximity to occupied buildings or fragile structures.

Operational Groundborne Vibration

Once operation, individual fiber projects would not include significant sources of ground-borne vibration. Therefore, long-term, operational vibration impacts would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure NOI-3: Vibratory Roller Use

Prior to issuing individual Project construction approvals or permits, the County shall insure that construction documentation includes the following restrictions. Vibratory rollers shall be used in static mode only (no vibrations) within the following distances:

- Within 15 feet of any occupied building; and,
- Within 18 feet of any older residential building; and,
- Within 60 feet of a fragile historical building, ruin, or ancient monument.

Significance with Mitigation: Less than significant impact.

NOI-3 The proposed project would not expose people residing or working in the project area to excessive noise levels from public use airports or private airstrips.

Aircraft operations associated with the County airports can generate noise levels exceeding 65 dBA CNEL, and individual fiber projects would be potentially subjected to airport-related noise exceeding acceptable levels, depending on their proximity to the airport. Individual fiber projects under the Project could fall within the noise impact areas of the Placerville Airport, Cameron Airpark, Georgetown Airport, and South Lake Tahoe Airport as described in their individual ALUCPs.

Construction would be short-term and temporary. Once operational, individual fiber projects would only require occasional short-term maintenance from employees. The project would not result in persons working for extended periods in proximity to the Placerville Airport, Cameron Airpark, Georgetown Airport, and South Lake Tahoe Airport. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise levels from public use airports or private airstrips. Impacts would be less than significant.

Significance without Mitigation: Less than significant.

¹ Equipment PPV = Reference PPV * (25/D)ⁿ (in/sec), where Reference PPV is PPV at 25 feet, D is distance from equipment to the receiver in feet, and n = 1.1 (the value related to the attenuation rate through the ground); formula from Caltrans 2020.

4.13.4 Cumulative Impacts

NOI-4 The proposed project may contribute to a cumulatively considerable impact on ambient noise levels in the County.

Cumulatively considerable impact would occur if construction noise or construction vibration of individual fiber projects combined with construction noise and vibration from other cumulative projects in the County would affect the same NSLU. Although the exact alignment and timing of the future broadband infrastructure under the proposed Project is currently unknown, there is the potential that some of the locations for future infrastructure could coincide in location and time with other cumulative projects in the County, as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis which could result in potentially cumulatively considerable impacts. Numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. However, other cumulative projects in the County would also be subject to CEQA review and would be required to comply with any mitigation measures identified as necessary to reduce potential noise and vibration impacts. Implementation of Mitigation Measures NOI-1 through NOI-3 would ensure that the proposed Project's contribution to combined construction noise and vibration would be less than cumulatively considerable.

Significance without Mitigation: Potentially cumulatively considerable.

See Impact NOI-1 for Mitigation Measure NOI-1 and Mitigation Measure NOI-2 and see Impact NOI-2 for Mitigation Measure NOI-3.

Significance with Mitigation: Less than significant impact.

4.13.5 References

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<https://www.trpa.gov/wp-content/uploads/TRPA-Code-of-Ordinances.pdf>.

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4.14 POPULATION AND HOUSING

This section describes the regulatory framework and existing conditions related to population and housing and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on population and housing were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to population and housing.

4.14.1 Environmental Setting

4.14.1.1 Regulatory Framework

This section describes State and local environmental laws and policies that are relevant to the CEQA review process for population and housing. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

State Regulations

California Planning Law – General Plan Housing Element

California Government Code Section 65302 requires local jurisdictions to adopt a housing element as part of its general plan. The housing element identifies future housing needs for all income levels and provides strategies for meeting those needs. The California Department of Housing and Community Development (HCD) assigns the jurisdictions a set of projected housing numbers, by income level, as part of the Regional Housing Needs Allocation (RHNA) process. Under State law, the County of El Dorado (County), City of Placerville, and City of South Lake Tahoe must adopt a land use plan and regulatory system to provide sufficient opportunities for housing development to meet its share of the allocated housing need. The HCD reviews each housing element for adequacy in meeting the requirements of State law. An adopted housing element that has been approved by HCD is presumed to meet the requirements of state law for the term of the element.

Pursuant to State law, the housing element must be updated every eight years, based on the regional housing needs for the next eight-year cycle, however, jurisdictions can opt to update their housing elements every five years or every eight years. Pursuant to state law, El Dorado County and the incorporated cities of South Lake Tahoe and Placerville were scheduled to adopt a new Housing Element by May 2021 for the 2021-2029 cycle (6th Cycle). The City of South Lake Tahoe adopted a five-year housing element, as reflected in the City's 2022-2027 Housing Element. The City of Placerville adopted an eight-year housing element, as reflected in the City's 2021-2029 Housing Element.

The housing numbers reflected in the housing elements are projections rather than mandatory requirements for housing construction. Actual construction will depend on market conditions, regulatory requirements, and other factors.

California Government Code Section 65584

In accordance with Government Code Section 65584, projected housing needs for each region in California are prepared by the HCD. The State requires regional housing plans to be developed by local

jurisdictions based on the countywide housing projections. The HCD RHNA requirements are relevant to analysis of the project and are outlined below in Table 4.14-1 and Table 4.14-2.

Table 4.14-1
HOUSING ALLOCATIONS FOR EL DORADO COUNTY AND CITY OF PLACERVILLE (2021-2029 RHNA)

Jurisdiction	Lower-Income Units			Higher Income Units		Total RHNA
	Very Low	Low	Very Low + Low	Moderate	Above Moderate	
El Dorado County, Unincorporated	1,441	868	2,309	903	2,141	5,353
City of Placerville	56	34	90	50	119	259

Source: County 2021, City of Placerville 2021.

Table 4.14-2
CITY OF SOUTH LAKE TAHOE HOUSING ALLOCATION (2022-2027 RHNA)

Jurisdiction	Lower-Income Units			Higher Income Units		Total RHNA
	Extremely Low	Very Low	Low	Moderate	Above Moderate	
City of South Lake Tahoe	35	35	50	42	127	289

Source: City of South Lake Tahoe 2022.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of El Dorado County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has land use authority within the basin.

TRPA Regional Plan

Population and housing are addressed within the Housing sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024). The Housing sub-element contains the following goals and policies that apply to the Project:

- **Goal HS-1:** Promote housing opportunities for full-time and seasonal residents as well as workers employed within the Region.
 - **Policy HS-1.1:** Special incentives, such as bonus development units, will be given to promote affordable or government-assisted housing for lower income households (80 percent of respective county's median income) and for very low income households (50 percent of respective county's median income). Each county's median income will be determined according to the income limits published annually by the Department of Housing and Urban Development.

- **Policy HS-1.2:** Local governments will be encouraged to assume their "fair share" of the responsibility to provide lower and very low income housing.
- **Policy HS-1.3:** Facilities shall be designed and occupied in accordance with local, regional, state, and federal standards for the assistance of households with low and very low incomes. Such housing units shall be made available for rental or sale at a cost to such persons that would not exceed the recommended state and federal standards.
- **Policy HS-1.4:** Affordable or government assisted housing for lower income households should be located in close proximity to employment centers, government services, and transit facilities. Such housing must be compatible with the scale and density of the surrounding neighborhood.
- **Goal HS-2:** To the extent feasible, without compromising the growth management provisions of the Regional Plan, the attainment of threshold goals, and affordable housing incentive programs, moderate income housing will be encouraged in suitable locations for the residents of the Region.
 - **Policy HS-2.1:** Special incentives, such as bonus development units, will be made available to promote housing for moderate income households (120 percent of respective county's median income). Such incentives shall be made available within jurisdictions that develop housing programs that are substantially consistent with and complementary to the Regional Plan.
 - **Policy HS-2.2:** Residential units developed using moderate income housing incentives shall be used to provide housing for full-time residents of the Tahoe Region. Such units shall not be used for vacation rental purposes.
 - **Policy HS-2.3:** Residential units developed using moderate income housing incentives shall remain permanently within the program.
- **Goal HS-3:** Regularly evaluate housing needs in the region and update policies and ordinances if necessary to achieve state, local and regional housing goals.
 - **Policy HS-3.1:** TRPA shall regularly review its policies and regulations to remove identified barriers preventing the construction of necessary affordable housing in the region. TRPA staff will work with local jurisdictions to address issues including, but not limited to, workforce and moderate-income housing, accessory dwelling units and long-term residency in motel units in accordance with the timeline outlined in the implementation element. due to the challenges of building affordable and workforce housing in the Tahoe Basin, TRPA and/or the local jurisdictions shall set density, height, and parking standards to promote projects that include deed-restricted affordable, moderate, and achievable housing units through the following options:
 - A. TRPA shall adopt development standards to promote 100 percent deed-restricted affordable, moderate and achievable housing that supersede local jurisdiction's standards, including in approved area plans (as set forth in TRPA Code section 13.6.7), and TRPA plan area statements and community plans; or

B. Local jurisdictions may propose within an area plan, alternative development standards for deed-restricted affordable, moderate or achievable housing that adjust TRPA’s standards if the jurisdiction demonstrates that the alternative standards are at least as effective as TRPA standards in facilitating the construction of deed-restricted affordable, moderate, and achievable housing in the applicable jurisdiction. These alternatives may include, but are not limited to, an approved inclusionary housing ordinance, zoning additional areas for multi-family housing, providing donated land or other public subsidies, or installation of area-wide stormwater systems in preferred affordable and workforce housing locations.

Local Regulations

El Dorado County General Plan Housing Element

The housing element is one of seven mandatory elements of the El Dorado County (County) General Plan. The purpose of the housing element is to support and identify an adequate supply of housing affordable to lower-income households by providing guidance in the development of future plans, procedures and programs, and by removing governmental constraints to housing production. The following goals, policies, and implementation measures from the *2021-2029 Housing Element* of the County’s General Plan are relevant to the discussion of population and housing in the Project area (County 2021):

- **Goal HO-1:** To provide for housing that meets the needs of existing and future residents in all income categories.
 - **Policy HO-1.2:** To ensure that projected housing needs can be accommodated, the County shall maintain an adequate supply of suitable sites that are properly located based on environmental constraints, community facilities, and adequate public services.
 - **Policy HO-1.5:** The County shall direct higher-density residential development to Community Regions and Rural Centers.
 - **Policy HO-1.6:** The County will encourage new or substantially rehabilitated discretionary residential developments to provide for housing that is affordable to very low-, low- and moderate-income households.
 - **Policy HO-1.11:** To the extent feasible, affordable housing in residential projects shall be dispersed throughout the project area.
 - **Policy HO-1.19:** The County shall review its surplus land inventory for potential sites to meet its affordable housing needs.
 - **Policy HO-1.26:** The County shall ensure that public services and facilities are provided to affordable housing projects at the same level as to market-rate housing. Incentives and/or subsidies shall be considered to support the production of housing for very low, low-, and moderate-income households.

- **Goal HO-3:** To conserve the County’s current stock of affordable housing.
 - **Policy HO-3.2:** Demolition of existing multifamily units should be allowed only if a structure is found to be substandard and unsuitable for rehabilitation and tenants are given reasonable notice, an opportunity to purchase the property, and/or relocation assistance by the landlord.
- **Goal HO-4:** To recognize and meet the housing needs of special groups of county residents, including a growing senior population, the homeless, agricultural employees, and the disabled through a variety of programs.
 - **Policy HO-4.1:** The development of affordable housing for seniors, including congregate care facilities, shall be encouraged.
 - **Policy HO-4.2:** County policies, programs, and ordinances shall provide opportunities for disabled persons, including developmentally disabled persons, to reside in all neighborhoods.
- **Goal HO-5:** To increase the efficiency of energy and water use in new and existing homes.
 - **Policy HO-5.1:** The County shall require all new dwelling units to meet current state requirements for energy efficiency and shall encourage the retrofitting of existing units.
 - **Policy HO-5.2:** New land use development standards and review processes should encourage energy and water efficiency, to the extent feasible.
- **Implementation Measure HO-1:** As part of each Specific Plan or other community plan update that requires a General Plan land use designation amendment, the County will annually review and revise land use patterns, existing densities, the location of job centers, and the availability of services to identify additional areas within the plan or project area that may be suitable for higher-density residential development to ensure that a sufficient supply of residentially designated land is available to achieve the County’s housing objectives. [Policy HO-1.2]
- **Implementation Measure HO-2:** Annually review available and adequate sites suitable for the development of affordable housing, with highest priority given to development of housing for extremely low-, very low-, and low-income households. Working with other public agencies, develop a work program that identifies the geographic areas where affordable housing development could best be accommodated without the need to construct additional infrastructure (e.g., water lines, sewer connections, additional or expanded roadways) that could add substantial costs to affordable housing developments. [Policy HO-1.2]
- **Implementation Measure HO-3:** Annually review and update the Capital Improvement Programs under the County’s control that contain strategies for extending services and facilities to areas that are designated for residential development, but do not currently have access to public facilities, so that the County’s housing goals, policies, and implementation measures are effectively applied. [Policies HO-1.5 and HO-1.26]

- **Implementation Measure HO-4:** Establish an interdepartmental working group to ensure cooperation between departments for implementation of County projects, including the County's Transportation Plan, the County's Housing Element, and any other County plan. Agencies include, but are not limited to, El Dorado Transit Authority, El Dorado County Transportation Commission, Chief Administrative Officer, Board of Supervisors, Planning and Building Department. [Policies HO-1.5 and HO-1.26]
- **Implementation Measure HO-5:** Develop and adopt an incentive-based policy or policies that will encourage, assist, and annually monitor the development of housing that is affordable to extremely low-, very low-, low-, and moderate-income households. The incentive-based policy shall incorporate and expand upon existing affordable housing incentives prescribed by state law and shall incorporate the affordable housing provisions from the Design and Improvement Standards Manual, Residential Development Processing Procedures, and Infill Incentives Ordinance. Actions will include forming a committee to explore fee reduction and mitigation options with state and local agencies, including water purveyors and school districts for special needs and affordable housing developments. The policy or policies shall also consider partnerships with nonprofit housing organizations whose mission is to expand and preserve permanently affordable rental and ownership housing for low and moderate-income housing such as community land trusts. The policy shall include annual monitoring of the effectiveness of the incentives in producing affordable housing, and a process for developing and implementing subsequent actions if it is determined that the existing incentive program is not effective. The monitoring program shall include an analysis of effectiveness of the TIM fee offset program for affordable housing projects in reducing fee constraints. If the results of the monitoring process find the program to be ineffective in providing adequate incentives, the policy shall be adjusted.

The County will promote the policy or policies by posting them on the El Dorado County website, providing handouts in booklet form in the Development Services Department, and annually sending the policy booklet to developers (both for-profit and non-profit) who are active in the County, with an emphasis on promoting incentives to encourage development of affordable housing in high resource areas to improve economic mobility between high and low resource areas. [Policy HO-1.6]

- **Implementation Measure HO-14:** Adopt an infill incentive ordinance to assist developers in addressing barriers to infill development. Incentives could include, but are not limited to, modifications of development standards, such as reduced parking and setback requirements, to accommodate smaller or odd-shaped parcels, and waivers or deferrals of certain development fees, helping to decrease or defer the costs of development that provide housing for extremely low-, very low-, and low-income households. Encourage use of incentives to construct affordable housing in areas of high opportunity and increase supply of affordable housing to reduce displacement risk for low-income households. Incentives may also encourage higher density scattered site projects that can demonstrate substantial environmental, social, and economic benefits for the County utilizing existing infill, blighted or underutilized properties similar to the Kings Beach Housing Now multifamily housing project by Domus Development LLC in Lake Tahoe. [Policy HO-1.5]
- **Implementation Measure HO-25:** Explore models to encourage the creation of housing for persons with special needs, including seniors, persons with disabilities, female-headed households, persons with developmental disabilities, extremely low- very low- and low-income

households, farmworkers, and homeless persons. Such models could include assisting in housing development through the use of set-asides, scattered site acquisition, new construction, and pooled trusts; providing housing services that educate, advocate, inform, and assist people to locate and maintain housing; and models to assist in the maintenance and repair of housing for persons with special needs. The County shall also seek state and federal funds on an annual basis for direct support of housing construction and rehabilitation and will provide the list of available funding to for-profit and non-profit developers. [Policies HO-4.2 and HO-4.3]

- **Implementation Measure HO-31:** Provide information to the public regarding ways to improve the efficient use of energy and water in the home and to increase energy and water efficiency in new construction in support of the Environmental Vision for El Dorado County, Resolution 29-2008. This program will be promoted by posting information on the County's website and creating a handout to be distributed with land development applications. [Policies HO-5.1 and 5.2]

The County has set goals to address and support positive environmental change, including, but not limited to:

- Continue PACE financing cooperation with providers such as Ygrene, Open PACE, and HERO that provide a financing mechanism for homeowners looking to make energy-efficiency upgrades
- Promote the use of clean, recycled, and "green" materials 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
- Promote safe and healthy homes by exploring a policy or ordinance establishing multi-unit housing as 100 percent smoke-free spaces.
- 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.

City of Placerville General Plan Housing Element

To address the community conditions and housing needs identified within the Housing Background Report, the City of Placerville has adopted actions to facilitate the development of housing to meet the City's regional housing needs allocation, programs to assist in the production and rehabilitation of a wide range of housing and shelter, and programs that establish supportive services for all income levels and special needs groups. The following goals, policies, and implementation programs from the 2021-

2029 Housing Element of the City of Placerville’s General Plan are relevant to the discussion of population and housing in the Project area (City of Placerville 2021):

- **Goal A:** Provide adequate sites to meet future housing needs and the City of Placerville’s share of regional housing needs.
 - **Policy A.1:** The City of Placerville will maintain an inventory of vacant residential sites, to be updated annually.
- **Goal C:** To facilitate the development of rental and for-sale housing affordable to extremely low, low, and moderate-income households.
 - **Policy C.2:** The City of Placerville will pursue state and federal funding to assist in developing housing affordable to extremely low-, low-, and moderate-income households.
 - **Policy C.3:** The City of Placerville will review the Zoning Ordinance, permit processes, and development impact fees to identify and remove potential constraints to the development of a range of housing for all income levels and needs.
- **Goal F:** To preserve the existing housing stock.
 - **Policy F.1:** The City of Placerville will continue to provide rehabilitation assistance to low- and moderate-income households.
 - **Policy F.2:** The City of Placerville will conduct a housing condition survey to identify areas of the community most in need of rehabilitation assistance.
- **Implementation Program A-1: RHNA Residential Land Inventory.** The City of Placerville will maintain an updated inventory of land in the City sufficient to meet the City’s share of the RHNA for the 2021-2029 planning period. Information on these and other vacant residential parcels will be available at City Hall, posted on the City of Placerville’s website, provided to local homebuilder organizations, and provided to nonprofit homebuilders. The City of Placerville will submit an annual report on the vacant land inventory to the City Council and Planning Commission in conjunction with the annual Housing Element status and progress report to the Housing and Community Development Department on the City’s Implementation Programs (Government Code Section 65400). The City of Placerville shall pay specific attention regarding site inventory that would accommodate housing development for households affordable at the extremely low, low- and moderate-income levels to ensure the RHNA can be reached over the planning period. The City of Placerville will rezone lands if necessary to ensure remaining RHNA needs are met during the planning period.
- **Implementation Program A-2: Infill Development Sites.** Before seeking to annex land within the Sphere of Influence, the City of Placerville will encourage the development of vacant residentially zoned infill sites where adequate public facilities and services are already in place and where small projects can be integrated with existing neighborhoods. The City of Placerville maintains an inventory of vacant residentially zoned parcels in addition to the inventory under Program A-1 to accommodate RHNA. The City will provide the following incentives for infill development and property re-use:

- Approve density bonuses for projects that include affordable housing.
 - Allow exceptions or alternative approaches to meeting zoning standards that are consistent with standards met by surrounding properties.
 - Promote infill development and property re-use opportunities on the City of Placerville's web site, distribute the infill/re-use site inventory to local homebuilder groups and non-profit organizations, and provide the inventory to interested individuals at the City's permit counter. The City of Placerville assumes that the infill site inventory and the proposed incentives will increase interest in the development of housing. Such development would support several of the City of Placerville's General Plan orderly development and infill development policies. The site inventory will also provide the City of Placerville with greater specificity regarding the potential to develop housing close to services, transit, and jobs.
- **Implementation Program A-4: No Net Loss.** Government Code Section 65863 stipulates that a jurisdiction must ensure that its Housing Element inventory can accommodate its share of the RHNA by income level throughout the planning period. If a jurisdiction approves a housing project at a lower density or with fewer units by income category than identified in the Housing Element, it must quantify at the time of approval the remaining unmet housing need at each income level and determine whether there is sufficient capacity to meet that need. If not, the city or county must "identify and make available" additional adequate sites to accommodate the jurisdiction's share of housing need by income level no later than 180 days following the approval of the reduced-density project.

The City of Placerville will evaluate residential development proposals for consistency with goals and policies of the General Plan and the 2021-2029 Housing Element sites inventory and make written findings that the density reduction is consistent with the General Plan and that the remaining sites identified in the Housing Element are adequate to accommodate the RHNA by income level. If a proposed reduction of residential density will result in the residential sites inventory failing to accommodate the RHNA by income level, the City will identify and make available additional adequate sites to accommodate its share of housing need by income level no later than 180 days following the approval of the reduced density project.

- **Implementation Program C-2: Accessory Dwelling Units (ADUs).** The City of Placerville will amend its Zoning Ordinance to comply with all state law pertaining to Accessory Dwelling Units (ADUs) and Junior Accessory Dwelling Units (JADUs). The City will continue to promote ADUs through handouts available at the Development Services Department and Finance permit counters, the City of Placerville's website, and utilizing an informational insert in property owner utility bills.
- **Implementation Program F-5: Demolition Regulation.** Amend the Zoning Ordinance to require the discretionary review of a demolition permit request for full or partial removal of any housing unit on its impact on affordable housing stock. Under this policy, removal of a unit could include the full physical demolition of a housing unit or any interior wall demolition that would merge two separate living units.

City of South Lake Tahoe General Plan Housing Element

The housing element is a State-mandated element that every general plan must contain. Although the housing element must follow all the requirements of the general plan, the housing element has several State-mandated requirements that distinguish it from other general plan elements. Whereas the State allows local governments the ability to decide when to update their general plan, state law sets the schedule for periodic update (five- or eight-year time frame) of the housing element. The purpose of the housing element is to identify the community's housing needs, to state the community's goals and objectives regarding housing production, rehabilitation, and conservation to meet those needs, and to define the policies and programs that the community will implement to achieve the stated goals and objectives. The following goals, policies, and implementation programs from the *2022-2027 Housing Element* of the City of South Lake Tahoe's General Plan are relevant to the discussion of population and housing in the Project area (City of South Lake Tahoe 2022):

- **Goal HE-1:** To increase housing opportunities for South Lake Tahoe residents of all economic levels.
 - **Policy 1-5:** The City of South Lake Tahoe shall encourage development that reuses infrastructure associated with existing underutilized sites to help developers benefit from “grandfathered” excess land coverage, existing sewer units, air quality mitigation fee reductions, and other benefits associated with the redevelopment of existing lots.
 - **Policy 1-6:** The City of South Lake Tahoe shall encourage the production of housing as part of mixed-use projects in commercial nodes, in Town Centers, in Regional Centers, and in any other high-density.
- **Goal HE-2:** To encourage construction and maintenance of affordable and workforce housing in South Lake Tahoe.
 - **Policy 2-3:** The City of South Lake Tahoe shall encourage a range of housing options so that people who work in South Lake Tahoe can choose to live in the city.
- **Goal HE-3:** To preserve and enhance the existing supply of housing.
 - **Policy 3-9:** The City of South Lake Tahoe shall take all reasonable means to ensure that existing affordable and workforce housing opportunities are protected and preserved, and discourage the demolition of existing affordable housing sites without adequate mitigation.
- **Implementation Program 1-1: Mixed-Use Development.** The City of South Lake Tahoe shall continue to create and implement incentives (i.e., alternative parking requirements, streamlined permitting) to encourage production of housing in areas where residential use is appropriate to the setting and where mixed-use projects could address job and housing needs. Incentives have been included in the Tourist Core Area Plan and Tahoe Valley Area Plan as well as for affordable residential development throughout the City. The City of South Lake Tahoe provides information regarding the incentives at City Planning Division offices and on the City's website.

- **Implementation Program 1-7:** To ensure that there is a sufficient supply of multifamily zoned land to meet the City of South Lake Tahoe’s Regional Housing Needs Allocation (RHNA), the City will continue to encourage lot consolidations to combine small residential lots into larger developable lots by proactively reaching out to local developers (as part of Program 1-4) and meeting with local developers to discuss development opportunities and advertise incentives for lot consolidation to accommodate affordable housing units and making applicants aware of these opportunities at the planning counter. In addition, the City of South Lake Tahoe will continue to allow administrative processing of lot consolidation. As developers/owners approach the City of South Lake Tahoe interested in lot consolidation for the development of affordable housing, the City will offer one or more of the following local incentives on a project-by-project basis given property owners’ and developers’ needs:
 - Continue to discuss consolidation opportunities with property owners of adjacent parcels identified in Appendix A. This incentive is currently in place.
 - Implement a process to guide property owners through the lot consolidation (lot line adjustment) application process, and waive the fee for this particular entitlement when the resulting project includes deed-restricted affordable units.
 - Continue to assist property owners in identifying and applying for financial resources for projects which incorporate affordable units. This incentive is currently in place.
- **Program 3-6: Replacement of Lost Units from Residential Demolitions.** In accordance with California Government Code Section 65583.2(g), the City of South Lake Tahoe will require replacement housing units subject to the requirements of California Government Code Section 65915(c)(3) on sites identified in the sites inventory when any new development (residential, mixed-use, or nonresidential) occurs on a site that has been occupied by or restricted for the use of lower-income households at any time during the previous five years. This requirement applies to non-vacant sites and vacant sites with previous residential uses that have been vacated or demolished.

4.14.1.2 Existing Conditions

Population

The total population of El Dorado County in 2023 was 192,215. The City of Placerville had an estimated population of 10,656 and the City of South Lake Tahoe had an estimated population of 21,079 (U.S. Census Bureau). With approximately 1,790 square miles of land, the County has a population density of approximately 107.4 persons-per-square mile. Much of the County’s population is concentrated in the western slope of the County, nearest to the Sacramento County line and along U.S. Highway 50. Additional small towns and communities are scattered throughout the County (County 2003).

El Dorado County’s total population is estimated to grow by an additional 16,846 persons by 2030 from the 2020 population (191,581). According to these projections, it is expected that the El Dorado County population would increase 8.8 percent by 2030, with an average annual growth rate of 0.9 percent per year (County 2021). Table 4.14-3 provides the population projections of the Countywide population in the years 2025, 2030, 2035, and 2040.

**Table 4.14-3
POPULATION PROJECTIONS IN EL DORADO COUNTY**

	Year				
	2020	2025	2030	2035	2040
Population	191,581	199,521	208,457	217,619	225,419
Increase from previous period	-	7,940	8,936	9,162	7,800
Average annual growth from previous period (in percentage)	-	4.1	4.5	4.4	3.6

Source: County 2021.

Housing

In 2010, there were a total of 84,960 housing units in the entire County. By 2019, this number increased by 8.3 percent to a total of 91,987 housing units. Between 2010-2019, total housing units increased by 9.4 percent in unincorporated El Dorado County; 3.8 percent in the City of Placerville; and 4.9 percent in the City of South Lake Tahoe (County 2021; City of Placerville 2021; City of South Lake Tahoe 2022). Table 4.14-4 contains a summary of housing units per housing type in the unincorporated County and incorporated cities of Placerville and South Lake Tahoe.

**Table 4.14-4
HOUSING UNITS BY TYPE IN EL DORADO COUNTY**

Housing Type	2010	2019	Percent Growth
<i>Unincorporated El Dorado County</i>			
Single-Family (attached + detached)	57,727	63,375	9.8
2 to 4 units	1,023	1,602	56.6
5+ Units	3,021	3,073	1.7
Mobile Homes	3,561	3,391	-4.8
Total	65,332	71,441	9.4
<i>City of Placerville</i>			
Single-Family (attached + detached)	3,123	3,291	5.4
2 to 4 units	811	814	0.4
5+ Units	439	439	0.0
Mobile Homes	168	171	1.8
Total	4,541	4,715	3.8
<i>City of South Lake Tahoe</i>			
Single-Family (attached + detached)	9,852	9,954	1.0
2 to 4 units	2,454	2,454	0.0
5+ Units	2,218	2,860	29.0
Mobile Homes	563	563	0.0
Total	15,087	15,831	4.9
Countywide Total	84,960	91,987	8.3

Source: County 2021, City of Placerville 2021, City of South Lake Tahoe 2022

4.14.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on population and housing if the Project would:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

4.14.3 Impact Analysis

POP-1 The proposed project would not induce unplanned population growth in an area, either directly or indirectly.

Implementation of the Project would involve installation of fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. The Project would help attract individual broadband infrastructure investors to bring broadband infrastructure and reliable connectivity to the County for increasing health and safety factors, as well as for economic and quality of life reasons. The proposed Project would not directly induce population growth, as the Project would not create a substantial number of jobs, promote the construction of jobs, or remove any obstacles that currently impede growth in the County.

Construction of individual fiber projects would likely begin in 2025 and occur over the course of several years. Operation of individual fiber projects would be limited to routine maintenance or emergencies. It is anticipated that construction and operational activities under the proposed Project would not directly generate a substantial number of jobs, either temporarily or during maintenance operations, such that it would induce population growth in the County. Additionally, operation of the Project would provide and expand the availability of high-speed internet access to existing rural residents, businesses, schools, etc. in the County. It is reasonable to assume that implementation of the proposed Project would contribute to the retention of existing residents and businesses, which could indirectly contribute to a limited amount of future growth. However, the potential for this growth would be limited and would not substantially induce the County population. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

POP-2 The proposed project would not displace existing people or housing or necessitate the construction of replacement housing elsewhere.

As discussed under Impact POP-1, the proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical

roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' ROW. Implementation of the proposed Project would not require the construction of housing and, therefore, would not contribute to substantial unplanned population growth. The Project would not displace people or housing, or require the construction of replacement housing, as it would improve broadband within areas of the County that are currently unserved or underserved. Therefore, no existing people or housing would be displaced by the proposed project and no impact would occur.

Significance without Mitigation: No impact.

4.14.4 Cumulative Impacts

POP-3 The proposed project would not contribute to a cumulatively considerable impact on population and housing.

Cumulative impacts would occur when the proposed Project, in combination with other projects in El Dorado County, would directly or indirectly induce substantial population growth in an area or displace people or housing and necessitate the construction of replacement housing elsewhere. As discussed above under Impact POP-1 and POP-2, implementation of the proposed Project would result in a less than significant impact on population and housing.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. None of the cumulative projects, in combination with the proposed Project, would directly or indirectly induce substantial population growth. As discussed above in Impact POP-1 and POP-2, the proposed Project would not induce substantial population growth in the County, displace existing people or housing, or necessitate the construction of housing elsewhere. Therefore, the impact would be less than cumulatively considerable.

Significance without Mitigation: Less than significant impact.

4.14.5 References

El Dorado County (County). 2021. Sixth Cycle (2021-2029) Housing Element Update. August 31. Available at: https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/land-use/planning-and-zoning/adopted-general-plan/final-2021-2029-housing-element_bos-adoption-3-22-22.pdf.

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Tahoe Regional Planning Agency (TRPA). 2024. Regional Plan. Accessed August 26. Available at: <https://www.trpa.gov/wp-content/uploads/Adopted-Regional-Plan.pdf>.

United States Census Bureau (U.S. Census Bureau). 2023. QuickFacts. Accessed July 25. Available at: <https://www.census.gov/quickfacts/fact/table/southlaketahoecitycalifornia,placervillecitycalifornia,eldoradocountycalifornia,US/PST045223>.

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4.15 PUBLIC SERVICES

This section describes the regulatory framework and existing conditions related to public services and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on public services were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to public services.

4.15.1 Environmental Setting

4.15.1.1 Regulatory Framework

This section describes federal, State, and local environmental laws and policies that are relevant to the CEQA review process for public services. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Federal Land Policy and Management Act

The Federal Land Policy and Management Act (FLPMA) was enacted in 1976 and governs the way in which public lands administered by the BLM are managed. The FLPMA is the landmark legislation that provides a framework for managing federal land in perpetuity for the benefit of present and future generations. Under the FLPMA, public lands are to be managed "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use," (FLPMA 1976).

National Fire Protection Association

The National Fire Protection Association (NFPA) publishes standards, including the following standard, that are useful to the El Dorado County (County) Fire Department:

- NFPA 1710: Provides standards for response time; including a call processing time of 60 seconds; a personnel turnout time of 60 seconds for medical, and one minute twenty seconds for fires; and a travel time of 4 minutes (240 seconds). This equates to a 6 minute 20 second response time standard for fire calls.

National Trails Systems Act

The National Trails Systems Act (16 USC 1241), enacted in 1968, created a series of national trails to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the nation. This act established three types of trails, including the National Scenic Trails, National Recreation Trails, and connecting-and-side trails. The National Trails System currently consists of 30 National Scenic and Historic Trails and over 1,000 National Recreation Trails, and two connecting-and-side trails, with a total length of more than 50,000 miles. The National Trails provides recreational activities of hiking, horseback riding, mountain biking, and camping.

National Park Service Management Policies

The National Park Service (NPS) Management Policies (2006) provide broad policy guidance for the management of units of the national park system. Topics include park planning, land protection, natural and cultural resource management, wilderness preservation and management, interpretation and education, recreational uses, special uses of the parks, park facilities design, and concessions management.

State Regulations

California Fire Code

The California Fire Code (CFC) is Part 9 of the California Code of Regulations (CCR) Title 24, Building Standards Code. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, fire hydrant locations and distribution, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. Chapter 49 of the CFC contains requirements for Wildland-Urban Interface (WUI) areas and prescribes construction materials and methods in fire hazard severity zones (FHSZ); requirements generally parallel the California Building Code (CBC) Chapter 7A. The CFC is updated on a three-year cycle; the current 2022 CFC took effect on January 1, 2023.

California Public Resources Code

California Public Resources Code (PRC) Sections 4291 *et seq.* require that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained as many single specimens of trees or other vegetation that are maintained so as to manage fuels and not form a means of rapid-fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the CFC.

State Responsibility Areas (SRA) are defined by PRC Section 4102 as areas of the State in which the California Board of Forestry and Fire Protection has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where the California Department of Forestry and Fire Protection (CAL FIRE) has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value. In practice, some local government agencies (in this case, local volunteer fire districts), may also provide first response in some SRAs, in coordination with their local CAL FIRE unit. PRC Sections 4201-4204 directs CAL FIRE to map fire hazards within SRAs based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These FHSZ classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone.

Federal Responsibility Areas (FRA) are lands owned and managed by the federal government, which bears regulatory and financial responsibility for wildfire prevention and suppression on those lands.

Local Responsibility Areas (LRA) include lands that do not meet criteria for SRAs or FRAs, or are lands in incorporated areas, cultivated agricultural lands, and nonflammable areas in the unincorporated parts of

a county. LRAs can include flammable vegetation and wildland-urban interface areas. LRA fire protection is provided by city or local fire departments, fire protection districts, county fire departments, or by contract with CAL FIRE.

PRC Section 4290 requires the California Board of Forestry and Fire Protection to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within SRAs and lands within Very High Fire Hazard Severity Zones (VHFHSZ) of LRAs.

California Outdoor Recreation Plan

The California Outdoor Recreation Plan is the statewide master plan for parks, outdoor recreation, and open space for California. The plan provides policy guidance to all outdoor recreation providers, including federal, state, local, and special district agencies that provide outdoor recreational lands, facilities and services throughout California.

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.

Senate Bill 50

Senate Bill 50 (passed in 1998) sets forth a State school facilities construction program that includes restrictions on a local jurisdiction's ability to condition a project or mitigation of a project's impacts on school facilities in excess of fees set forth in Education Code 17620. The provisions of Senate Bill 50 allow the State to offer funding to school districts to acquire school sites, construct new school facilities, and modernize existing school facilities. Senate Bill 50 also establishes a process for determining the amount of fees developers may be charged to mitigate the impact of development on school facilities resulting from increased enrollment. Under this legislation, a school district could charge fees above the statutory cap only under specified conditions, and then only up to the amount of funds that the district would be eligible to receive from the State. This program has been found by the legislature to constitute "full and complete school facilities mitigation."

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of El Dorado County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has land use authority within the basin.

TRPA Regional Plan

Public services are addressed within the *Public Services & Facilities Element* of the TRPA Regional Plan (TRPA 2024). The *Public Services & Facilities Element* contains the following goal and policy that apply to the Project:

- **Goal PS-1:** Public services and facilities should be allowed to upgrade and expand to support existing and new development consistent with the Regional Plan. The intent of the Regional Plan is neither to stimulate nor to hinder development through the provision of public services and facilities. Rather, the plan attempts to provide supportive public services and facilities consistent with the development anticipated under the plan.
 - **Policy PS-1.1:** Public services and facilities should be allowed to upgrade and expand consistently with the land use element of the Regional Plan and federal, state, and local standards.

Local Regulations

El Dorado County Parks and Trails Master Plan

As directed by the *Parks and Recreation Element* of the El Dorado County General Plan, the El Dorado County Parks and Trails Master Plan was developed in 2012 to provide long term vision and direction for the planning, implementation, and management of west slope park and trail resources provided by El Dorado County for the benefit of residents and visitors. The purpose of the Master Plan is to coordinate with public and private recreation providers in El Dorado County and focus on areas where the County is the primary provider for parks and trails, while acknowledging the collaborative opportunities with special districts, local government, private businesses, state, and federal recreation providers (County 2012).

El Dorado County General Plan

Public services are addressed within the *Public Services and Utilities Element* and the *Parks and Recreation Element* of the County General Plan.

The *Public Services and Utilities Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2015):

- **Goal 5.1: Provision of Public Services.** Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.
 - **Objective 5.1.2:** Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to

cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.

- **Policy 5.1.2.1:** Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1 (See Table 4.15-1), demand is determined to exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a CIP project is funded and authorized which will increase service capacity.
- **Policy 5.1.2.2:** Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5-1 (See Table 4.15-1). The following Levels of Service shall apply to the review of discretionary projects.
- **Policy 5.1.2.3:** New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. Lack of available public or private services or adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project or cause for the reduction of size, density, and/or intensity otherwise indicated on the General Plan land use map to the extent allowed by State law.
- **Policy 5.1.2.4:** Service standards for public services and emergency services in Rural Centers and Rural Regions are different than in Community Regions based on lower intensity and density of land use.

**Table 4.15-1
EL DORADO COUNTY MINIMUM LEVELS OF SERVICE**

Service	Community Region	Rural Center and Rural Region
Public water source	As determined by purveyor	As determined by purveyor, when applicable
Private wells	Environmental Management	Environmental Management
Public water treatment capacity	As determined by purveyor	As determined by purveyor
Public sewer treatment capacity	As determined by purveyor	As determined by purveyor
On-site sewage disposal	Environmental Management	Environmental Management
Storm drainage	Department of Transportation	Department of Transportation
Solid waste	Environmental Management	Environmental Management
County and State road circulation system	E (<i>Level of Service</i>)	D (<i>Level of Service</i>)
Schools	As determined appropriate by the school districts	As determined appropriate by the school districts

Service	Community Region	Rural Center and Rural Region
Parks	Specific plan for new communities or Quimby Fee/dedication program for tentative maps	Specific plan for new communities or Quimby Fee/dedication program for tentative maps
Fire district response	8-minute response to 80 percent of the population	15 to 45-minute response
Sheriff	8-minute response to 80 percent of the population	No standard
Ambulance	10-minute response to 80 percent of the population	20-minute response in Rural Regions and “as quickly as possible” in wilderness areas*

Source: County 2015

*In accordance with State standards

- **Goal 5.7: Emergency Services.** Adequate and comprehensive emergency services, including fire protection, law enforcement, and emergency medical services.
 - **Objective 5.7.1: Fire Protection (Community Regions).** Ensure sufficient emergency water supply, storage, and conveyance facilities are available, and that adequate access is provided for, concurrent with development.
 - **Policy 5.7.1.1:** Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.
 - **Objective 5.7.2: Fire Protection (Rural Regions and Rural Centers).** Sufficient emergency water supply, storage, and conveyance facilities for fire protection, together with adequate access are available, or are provided for, concurrent with development.
 - **Policy 5.7.2.1:** Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.
 - **Objective 5.7.3: Law Enforcement.** An adequate, comprehensive, coordinated law enforcement system consistent with the needs of the community.
 - **Policy 5.7.3.1:** Prior to approval of new development, the Sheriff’s Department shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

- **Objective 5.7.4: Medical Emergency Services.** Adequate medical emergency services available to serve existing and new development recognizing that levels of service may differ between Community Regions, and Rural Centers and Regions.
 - **Objective 5.7.4.1:** Prior to approval of new development, the applicant shall be required to demonstrate that adequate medical emergency services are available and that adequate emergency vehicle access will be provided concurrent with development.
 - **Objective 5.7.4.2:** Prior to approval of new development, the Emergency Medical Services Agency shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.
- **Goal 5.8: School Services.** An adequate, high-quality school system consistent with the needs of current and future residents.
 - **Objective 5.8.1: School Capacity.** Require that adequate school capacity exists and/or appropriate mitigation consistent with State law to serve new residents concurrent with development.
 - **Policy 5.8.1.1:** School districts affected by a proposed development shall be relied on to evaluate the development's adverse impacts on school facilities or the demand therefor. No development that will result in such impacts shall be approved unless:
 1. To the extent allowed by State law, the applicant and the appropriate school district(s) have entered into a written agreement regarding the mitigation of impacts to school facilities; or
 2. The impacts to school facilities resulting from the development are mitigated, through conditions of approval, to the greatest extent allowed by State law.
 - **Objective 5.8.2: Land for School Facilities.** Support the identification and acquisition of land for the purpose of siting new school facilities to serve existing and future residents.
 - **Policy 5.8.2.2:** The affected school district shall be relied upon to review development applications to determine the ability of the district to serve the new development. The level of educational services shall not be reduced below acceptable levels as a consequence of new development to the extent permitted by State law.
- **Implementation Measure PS-B:** Review the County Code to identify revisions that could accomplish the following:

- Require and specify the nature of findings to be made by the approving body that a proposed project meets minimum standards for the provision of emergency services, including emergency water supply and conveyance and emergency access, and emergency service facilities. [Policy 5.1.2.1]
- **Implementation Measure PS-P:** Establish a working group to develop and oversee implementation of minimum Countywide standards for emergency response times, emergency access, emergency water supply and conveyance, and staffing ratios. Development of the minimum standards will not preclude emergency service providers from developing and implementing stricter standards for individual service areas. [Policies 5.7.1.1, 5.7.2.1, 5.7.4.1, and 5.7.4.2]
- **Implementation Measure PS-Q:** Establish a procedure for and the conditions under which coordination of the planning efforts of the County and the school districts will take place. [Policy 5.8.2.2]

The *Parks and Recreation Element* contains the following goals, objectives, policies, and implementation measure that apply to the Project (County 2004):

- **Goal 9.1: Parks and Recreation Facilities.** Provide adequate recreation opportunities and facilities including developed regional and community parks, trails, and resource-based recreation areas for the health and welfare of all residents and visitors of El Dorado County.
 - **Objective 9.1.1: Park Acquisition and Development.** The County shall assume primary responsibility for the acquisition and development of regional parks and assist in the acquisition and development of neighborhood and community parks to serve County residents and visitors.
 - **Policy 9.1.1.1:** The County shall assist in the development of regional, community, and neighborhood parks, ensure a diverse range of recreational opportunities at a regional, community, and neighborhood level, and provide park design guidelines and development standards for park development. The following national standards shall be used as guidelines for the acquisition and development of park facilities (included as Table 4.15-2):

Table 4.15-2
GUIDELINES FOR ACQUISITION AND DEVELOPMENT OF PARK FACILITIES

Park Types	Developed
Regional Parks	1.5ac/1,000 population
Community Parks	1.5ac/1,000 population
Neighborhood Parks	2.0ac/1,000 population
<i>Specific Standards (Neighborhood and Community Parks)</i>	
Cameron Park, Community Services District	5.0 ac/1,000 population
El Dorado Hills, Community Services District	5.0 ac/1,000 population
Planned Communities	5.0 ac/1,000 population

Source: County 2004.

- **Goal 9.2: Funding.** Secure an adequate and stable source of funding to implement a comprehensive County-wide parks and recreation plan.
 - **Objective 9.2.2: Quimby Act.** Land dedicated to the County under the Quimby Act and Quimby in-lieu fees shall continue to be used primarily to meet neighborhood park needs but may assist in meeting the community park standards as well.
 - **Policy 9.2.2.5:** The County shall establish a development fee program applicable to all new development to fund park and recreation improvements and acquisition of parklands such that minimum neighborhood, community, and regional park standards are achieved. This fee is in addition to Quimby Act requirements that address parkland acquisition only. The fee will be adjusted periodically to fully fund the improvements identified in the Parks and Capital Improvement Program concurrent with development over a five-year period
- **Implementation Measure PR-B:** Develop and implement a program to identify and pursue alternative methods to fund and/or support the acquisition and operation of parks and recreation facilities, including raw land. Funds may be used by the Airports, Parks, and Grounds Division of the County General Services Department or transferred to other public parks and recreation providers as deemed appropriate. [Policy 9.2.2.5]

Placerville Area Parks and Recreation Master Plan

The Placerville Area Parks and Recreation Master Plan was adopted in 2009 and updated in 2017 to include the change in inventory of facilities, recreation program participation, demographics, and levels of service that are expressed as a function of population. The purpose of this update is to provide specific guidance for the City of Placerville and supporting analysis for El Dorado County to manage and develop new facilities and recreation programs to meet the needs of the current and future population. The Master Plan update includes a comprehensive set of planning standards which are intended to guide future park development.

The Master Plan Update also includes information about the El Dorado County parks that serve residents of Placerville and the surrounding unincorporated areas of El Dorado County. The unincorporated areas addressed in this planning effort includes the communities of Coloma, Lotus, Gold Hill, Diamond Springs, Camino, Pollock Pines, and portions of Rescue (City of Placerville 2017).

City of Placerville General Plan

Public services are addressed within *Section IV – Public Facilities and Services* of the City of Placerville General Plan (City of Placerville 2004). The *Public Facilities and Services* section contains the following goals and policies that apply to the Project:

- **Goal D:** To establish and maintain a park system and recreation program that are suited to the needs of Placerville residents and visitors.
 - **Policy 2:** City of Placerville park acquisition and development efforts shall be based on a goal of five acres of usable developed neighborhood and community parkland per 1,000 residents within the city limits.

- **Policy 3:** The City of Placerville shall continue to assess park development fees on all new residential development sufficient to fund citywide park improvements.
- **Goal E:** To ensure that at least the current levels of public police and fire services are maintained as new development occurs.
 - **Policy 1:** The City of Placerville shall endeavor through adequate staffing and patrol arrangements to maintain the minimum feasible police response times for emergency calls. The City of Placerville's response time goals shall be three minutes for emergency calls, seven minutes for priority calls, and ten minutes for routine calls.
 - **Policy 4:** The City of Placerville shall support the Placerville Fire District in establishing additional fire stations where needed in order to maintain maximum coverage and minimum response times throughout its service area.
 - **Policy 5:** The City of Placerville shall attempt to offset the need for new fire department staff and equipment and to improve fire safety by requiring built-in fire protection equipment in new development.
- **Goal F:** To provide for the educational needs of Placerville residents.
 - **Policy 1:** The City of Placerville shall assist the Placerville Unified Elementary School District in locating and acquiring appropriate sites for new elementary schools as they are needed.
 - **Policy 2:** The City of Placerville shall cooperate with the Placerville Unified Elementary School District and the El Dorado Union High School District in collecting school impact fees.
- **Goal G:** To provide for the health care needs of Placerville residents.
 - **Policy 2:** The City of Placerville shall encourage the development of additional medical practices and convalescent homes to serve the area's growing population.

City of South Lake Tahoe Recreation Facilities Master Plan

The South Lake Tahoe Alliance for Recreation Facilities Master Plan was prepared in September 1998 in response to the need for a comprehensive look at the recreation situation facing South Lake Tahoe. The Master Plan inventoried existing facilities and identified the demand or need for additional facilities. The plan recognized that there is a need for additional public recreation facilities, especially given the fact that most athletic fields are located on school grounds and not within appropriate funding mechanisms to accomplish those goals. The five areas identified for recreational development were located near the following landmarks: Sierra Boulevard, Meyers Landfill, Zephyr Cove, Lake Tahoe Community College, and Tahoe Paradise Resort (City of South Lake Tahoe 2010).

City of South Lake Tahoe General Plan

Public services are addressed within the *Public/Quasi-Public Facilities and Services Element* and the *Recreation and Open Space Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011).

The *Public/Quasi-Public Facilities and Services Element* contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal PQP-1:** To ensure the timely maintenance, expansion, and upgrade of public facilities and services for the entire community.
 - **Policy PQP-1.5: Fair Share Costs on New Developments.** The City of South Lake Tahoe shall require that new development pay its fair share of the cost of providing new public services and/or the costs of expanding/upgrading existing facilities and services impacted by the new development.
- **Goal PQP-5:** To deter crime and to meet the growing demands for police services in South Lake Tahoe.
 - **Policy PQP-5.1: Police Protection.** The City of South Lake Tahoe shall continue to provide adequate police protection and law enforcement by maintaining a police department capable of meeting the needs of the entire community today and in the future.
 - **Policy PQP-5.5: Response Times.** The City of South Lake Tahoe shall continue to strive for response times of three minutes or less from the time law enforcement resources are dispatched.
- **Goal PQP-6:** To protect residents, employees, and visitors in South Lake Tahoe from injury and loss of life, and to protect property and businesses from fires.
 - **Policy PQP-6.4: Staffing Levels.** The City of South Lake Tahoe shall ensure that Fire Department staffing levels reflect enough aggregate personnel to perform the needed tasks to control the emergency and provide for life safety of the public and the responders.
 - **Policy PQP-6.6: Fire Response Times.** The City of South Lake Tahoe shall strive to maintain the following response times:
 - Still Alarms (Single Engine/Apparatus Response). The responding apparatus shall arrive within a four-minute travel time 90 percent of the time.
 - Fire Incidents (Multiple Apparatus Responses). The initial responding engine/apparatus shall arrive within a four-minute travel time 90 percent of the time, and the remaining assigned engines/apparatus shall arrive within a 10-minute travel time 90 percent of the time.

- **Emergency Medical Responses.** The initial responding fire apparatus shall arrive within a four-minute travel time 90 percent of the time with advanced life support transport (i.e., Paramedic Ambulance) units arriving within a 10-minute travel time 90 percent of the time.
- **Goal PQP-7:** To coordinate planning efforts with the Lake Tahoe Unified School District, Lake Tahoe Community College, and South Lake Tahoe Library in their efforts to provide for the educational needs of all South Lake Tahoe residents.
 - **Policy PQP-7.1: Development Coordination.** The City of South Lake Tahoe shall coordinate with the Lake Tahoe Unified School District to ensure that needed school facilities are available for use in a timely manner.
- **Implementation Program IMP-5.7: Police Equipment Plan.** The City of South Lake Tahoe shall adopt and regularly update a police equipment plan to prioritize the purchase and replacement of police equipment. [Policy PQP-5.1]
- **Implementation Program IMP-5.9: Fire Equipment Plan.** The City of South Lake Tahoe shall adopt and regularly update a Fire Equipment Plan to prioritize the purchase and replacement of fire equipment. [Policies PQP-6.4 and PQP-6.6]

The *Recreation and Open Space Element* contains the following goal, policies, and implementation program that apply to the Project:

- **Goal ROS-1:** To maintain and expand South Lake Tahoe’s public park system and recreational opportunities to meet the needs of residents, employees, and visitors.
 - **Policy ROS-1.1: Recreational Services.** The City of South Lake Tahoe shall design and develop recreational services to promote full use of recreational facilities within their design capacity.
 - **Policy ROS-1.9: Interconnected Public Recreation and Open Space System.** The City of South Lake Tahoe shall develop an interconnected system of open spaces, community parks, plazas, bike and pedestrian trails, and other types of public and private spaces as part of new development and redevelopment of existing sites.
- **Implementation Program IMP-6.1: Recreation Facilities Master Plan.** The City of South Lake Tahoe shall regularly update the Recreation Facilities Master Plan to reflect the recreational needs of South Lake Tahoe residents and visitors. [Policies ROS-1.1 and ROS-1.9]

4.15.1.2 Existing Conditions

Fire Protection

Lands within El Dorado County include FRAs, SRAs, and LRAs. Fire protection services for LRA lands are provided by 12 local fire districts and one city fire department. Nine fire districts are located on the western slope of the County, and four are located in the Lake Tahoe Basin. CAL FIRE’s Amador-El Dorado Unit (AEU) is responsible for providing fire protection services to SRA land in the County, and USFS is

responsible for fire prevention and suppression of FRA lands in the County, including the Eldorado National Forest and privately owned lands within the boundaries of the forest.

CAL FIRE and the local fire districts also provide emergency medical services (EMS) to the western slope of the County. EMS services from the fire districts are provided through a subcontract with the El Dorado County Regional Prehospital Emergency Services Operational Authority (County 2015).

Local Fire Protection Districts

Cameron Park Fire Department

The Cameron Park Fire Department (CPFD) operates within the Cameron Park Community Services District and serves a population of 18,000 with two fire stations. Station 88, located at 2961 Alhambra Drive, has a two-person engine crew, one full-time staffed Advanced Life Support Fire Engine, one reserve fire engine, and one utility vehicle. Station 89 is located at 3200 Country Club Drive and is the primary business office for CPFD. Station 89 has one full-time staffed Advanced Life Support Fire Engine, one full-time staffed Advanced Life Support Medic Unit (Medic 89), three reserve fire engines, one reserve medic unit, two command vehicles, and two utilities vehicle (CPFD 2024).

Diamond Springs-El Dorado Fire Protection District

The Diamond Springs-El Dorado Fire Protection District provides fire suppression, rescue and emergency medical services to the communities of Diamond Springs, El Dorado, Sleepy Hollow, Logtown, Missouri Flat, Nashville and Sandridge. The district serves approximately 11,731 residents and covers 65.5 square miles in a semi-urban and rural setting. Fire District personnel are made up of career, volunteer and limited term employees. Station 44 is located at 6109 Quartz Drive, El Dorado; Station 46 is located at 6170 Pleasant Valley Road, El Dorado; Station 47 is located at 2312 Oakvale Drive, Shingle Springs; Station 48 is located at 3840 Missouri Flat Road, Placerville; and Station 49, Administration Headquarters, is located at 501 Pleasant Valley Road, Diamond Springs (Diamond Fire 2024).

El Dorado County Fire Protection District

The El Dorado County Fire Protection District (EDCFPD) serves the communities of Apple Hill, Camino, Coloma, Cool, Gold Hill, Kyburz, Lotus, Oak Hill, Pacific House, Pilot Hill, Placerville, Pleasant Valley, Pollock Pines, Salmon Falls, Shingle Springs, Sierra Springs, Silver Fork, Strawberry, Texas Hill, and Twin Bridges with a population of approximately 74,000 residents in 281 square miles (County 2004). Station 15 is located at 16211 US 50, Strawberry; Station 16 is located at 13275 US 50, Kyburz; Station 17 is located at 6430 Pony Express Trail, Pollock Pines; Station 18 is located at 5785 Sly Park Road, Pollock Pines; Station 19 is located at 4429 Pleasant Valley Road, Placerville; Station 21 is located at 4040 Carson Road, Camino; Station 23 is located at 1834 Pleasant Valley Road, Placerville; Station 25 is located at 3034 Sacramento Street, Placerville; Station 26 is located at 730 Main Street, Placerville; Station 27 is located at 6051 Gold Hill Road, Placerville; Station 28 is located at 3860 Ponderosa Road, Shingle Springs; Station 72 is located at 7200 St Florian Court, Cool; Station 73 is located at 4302 State Highway 49, Pilot Hill; and Station 74 is located at 5122 Firehouse Road, Lotus (EDCFPD 2024).

El Dorado Hills Fire Department

El Dorado Hills Fire Department (EDHFD) was established the El Dorado Hills County Water District and currently provides fire suppression, emergency medical services, special and technical rescue, hazardous

materials mitigation, fire prevention, public education, disaster preparedness, and support to many community-based programs within the nearly 112 square miles of response district encompassing the communities of El Dorado Hills, Latrobe and, under a Shared Services agreement, Rescue. The former Latrobe Fire Protection District, including its two stations, was annexed into the EDFD in 2015. Station 83 is located at 5221 Deer Valley Road, Rescue; Station 84 is located at 2180 Francisco Drive, El Dorado Hills; Station 85, Administration Headquarters, is located at 1050 Wilson Boulevard, El Dorado Hills; Station 86 is located at 3670 Bass Lake Road, El Dorado Hills; Station 87 is located at 4680 Golden Foothill Parkway, El Dorado Hills; and Station 91 is located at 7660 South Shingle Road, Shingle Springs (EDHFD 2024).

Fallen Leaf Fire Department

The Fallen Leaf Fire Department (FLFD) operates within the Fallen Leaf Lake Community Services District. FLFD is located at 241 Fallen Leaf Road, Lake Tahoe (FLFD 2024).

Garden Valley Fire Protection District

The Garden Valley Fire Protection District (GVFPD) provides fire, rescue, and non-transport ALS medical response to a 60 square mile area with a population of 8100 people. Station 51 is located at 4860 Marshall Road, Garden Valley; Station 52 is located at 9762 Georgetown Road, Kelsey; and Station 53 is located at 4131 Zdolsek Place, Greenwood (GVFPD 2024).

Georgetown Fire Protection District

The Georgetown Fire Protection District (GFPD) covers 96 square miles containing 2330 parcels. The population of the district is about 6,500. Current district staffing includes a full time Chief, a full time Administrative Assistant, two full time Firefighter-EMTs, and a part time Fire Equipment Mechanic. There are approximately 30 fire line volunteer firefighters on the roster. Station 61, Headquarters, is located at 6281 Main Street, Georgetown; Station 62 is located at 7331 Wentworth Springs Road, Georgetown; Station 63 is located at 4900 Volcanoville Road, Georgetown; Station 64 is located at 2065 Sliger Mine Road, Greenwood; and Station 65 is located at 10561 Sand Mountain Boulevard, Georgetown (GFPD 2024).

Lake Valley Fire Protection District

The Lake Valley Fire Protection District (LVFPD) currently serves the community of Meyers, an area of approximately 83 square miles. LVFPD is mainly a residential community with a year-round population of about 12,000. During the busy seasons with the influx of visitors, that number can be as high as 50,000. Station 5 is located at 1009 Boulder Mountain Court, South lake Tahoe; Station 6 is located at 1286 Golden Bear Trail, South Lake Tahoe; and Station 7, Administrative Headquarters, is located at 2211 Keetak Street, South Lake Tahoe (LVFPD 2024).

Meeks Bay Fire Protection District

The Meeks Bay Fire Protection District (MBFPD) covers approximately 32 square miles and includes both SRA and FRA lands. MBFPD provides the community with fire prevention, suppression, rescue and life safety, and emergency medical services. Through a contract agreed upon in 2014, North Tahoe Fire Protection District (Placer County) provides all emergency response staff and management of

administration duties through the MBFPD Station 67, located at 8041 Highway 89, Tahoma (MBFPD 2024).

Mosquito Fire Protection District

The Mosquito Fire Protection District (MFPD) covers a 13-square-mile area with a population of 1,400–1,500 residents. The district has one station, two paid firefighters, and 25 volunteer firefighters (County 2003). MFPD's only station, Station 75, is located at 8801 Rock Creek Road, Placerville (MFPD 2024).

Pioneer Fire Protection District

The Pioneer Fire Protection District (PFPD) serves a 296-square-mile area with a population of 16,000. The district has six stations, one staffed with paid personnel, the other by volunteers (County 2003). Station 68, District Headquarters, is currently the only fully staffed station and is located at 7061 Mt Akum Road, Somerset (PFPD 2024).

Rescue Fire Protection District

The Rescue Fire Protection District (RFPD) covers a 34-square-mile area with a population of 4,500 (County 2003). Station 81 is located at 1722 Lotus Road, Placerville, and Station 83 is located at 5221 Deer Valley Road, Rescue (RFPD 2024).

South Lake Tahoe Fire Rescue

South Lake Tahoe Fire Rescue (SLTFS) serves the City of South Lake Tahoe and provides advanced life support services from three Fire Stations in the City. Station One, Battalion Headquarters, is located at 1252 Ski Run Boulevard, South Lake Tahoe; Station Two is located at 2951 Lake Tahoe Boulevard, South Lake Tahoe; and Station Three, Administration Headquarters, is located at 2101 Lake Tahoe Boulevard, South Lake Tahoe (SLTFS 2024).

California Department of Forestry and Fire Protection

CAL FIRE's AEU is responsible for providing fire protection services to 548,531 acres of SRA land in the County. According to the CAL FIRE Fire Hazard Severity Zone Map for El Dorado County, 419,622 acres are Very High; 109,327 acres are High; and 19,582 acres are Moderate (CAL FIRE 2024). In fulfillment of the mutual aid agreement with the local fire districts and USFS, CAL FIRE also responds to and abates uncontrolled fire that threatens to destroy life, property, or natural resources outside the SRA. CAL FIRE operates five State-owned fire stations near the communities of Camino, El Dorado, Pilot Hill, Garden Valley, and River Pines.

U.S. Forest Service

USFS is responsible for fire prevention and suppression in the FRAs of the County, including the El Dorado National Forest and privately owned lands within the forest boundaries. USFS also provides mutual aid to CAL FIRE. USFS uses a variety of fire management techniques, including fuel loading management, fire hazard clearance from structures, and control of high-risk human activities. USFS currently operates from eight facilities that serve the county in the Pioneer (Amador County), Grizzly Flats, Sly Park, Pollock Pines, Kyburz, Crystal Basin, and Georgetown areas (County 2003).

Police Protection

El Dorado County Sheriff's Department

The El Dorado County Sheriff's Office (EDSO) provides police protection services to the unincorporated areas of the County through two main offices: the Placerville Office and the South Lake Tahoe Office. EDSO maintains jail facilities in the cities of Placerville and South Lake Tahoe. Additionally, EDSO operates three substations within the western slope of the County in the unincorporated communities of El Dorado Hills, Cameron Park, and Georgetown (County 2003).

Although EDSO has offices and jail facilities in Placerville and South Lake Tahoe, these incorporated cities each have their own independent police forces and facilities, discussed in greater detail below.

City of Placerville Police Department

The City of Placerville Police Department provides law enforcement services within the Placerville City limits. The department has one office, located at 730 Main Street. The City of Placerville General Plan mandates that the department strive to achieve a response time of three minutes for emergency calls, seven minutes for priority calls, and 10 minutes for routine calls (City of Placerville 2015).

City of South Lake Tahoe Police Department

The City of South Lake Tahoe Police Department (SLTPD) provides law enforcement services within incorporated South Lake Tahoe. The SLTPD has a jurisdictional area of approximately 13 square miles. Approximately 5 of these acres include the waters of Lake Tahoe. The SLTPD consists of 44 sworn officers, 22 non-sworn staff, and 10 reserve officers. The department is located at 1532 Johnson Boulevard, which is the City's only police facility (City of South Lake Tahoe 2010).

California Highway Patrol

The California Highway Patrol (CHP) is a Statewide organization with responsibility for law enforcement for State highways and roads. Primary responsibilities of the CHP include traffic safety, service to the motoring public, and protection of State property. CHP services include law enforcement, traffic control, accident investigation, and the management of hazardous materials spill incidents. El Dorado County is located within the Valley Division of the CHP, which consists of the greater Sacramento area and the Sierra Nevada foothills to the east, and oversees four major highways: Interstate 80, Interstate 5, U.S. 50, and SR 99, in addition to thousands of miles of State and County roads. The Valley Division has a multitude of specialized programs including: K-9 Program, Air Operations, Bicycle Patrol, Commercial Enforcement, Safety Services Program, and Salvaged Vehicle Identification (CHP 2024a).

CHP maintains three offices within El Dorado County, located in the cities of Placerville and South Lake Tahoe, and in the unincorporated community of Gold Run (CHP 2024b).

Schools

There are currently 15 school districts with 67 schools and related public education facilities in El Dorado County. In the 2022-2023 school year, the enrollment in the County for all school districts and associated facilities was 31,268 students (Ed Data 2024). Table 4.15-3 summarizes the enrollment for each of the school districts.

**Table 4.15-3
SCHOOL DISTRICTS AND ENROLLMENT IN EL DORADO COUNTY**

School District	2022-2023 Enrollment	Schools			
		Elementary	Middle/Junior High School	High School	Other
Black Oak Mine	1,253	3	0	1	K-12, 7-12
Buckeye Union	9,659	8	2	0	K-8, K-8, K-8 K-12, K-12
Camino Union Elementary	428	0	0	0	K-8, K-8
El Dorado Union High School	6,716	0	0	5	11-12
Gold Oak Union Elementary	466	1	1	0	0
Gold Trail Union Elementary	520	1	1	0	0
Indian Diggings Elementary	10	0	0	0	1-7
Lake Tahoe Unified	3,648	4	1	1	K-9, 10-12
Latrobe Elementary	161	1	1	0	0
Mother Lode Union Elementary	843	2	1	0	0
Pioneer Union	275	2	1	0	0
Placerville Union Elementary	1,167	2	1	0	0
Pollock Pines Elementary	590	1	1	0	0
Rescue Union Elementary	3,520	5	3	0	0
Silver Fork Elementary	13	0	0	0	K-8

Source: Ed Data 2024.

In addition, two higher learning institutions are located within El Dorado County: Lake Tahoe Community College, located in South Lake Tahoe; and the Folsom Lake Community College's El Dorado Center, located in Placerville.

Parks

Recreation facilities within the County are overseen by the El Dorado County Parks and Recreation Department, the City of Placerville Recreation and Parks Division, and the City of South Lake Tahoe Parks and Recreation Department. The diverse natural characteristics of El Dorado County promote a wide range of recreational opportunities for residents and visitors, which are provided by local parks and recreation service providers, federal and State agencies, and other recreation providers. For additional information about parks and recreation facilities in El Dorado County, please see Section 4.16, *Recreation*, of this program EIR.

Libraries

The existing County Library System consists of six library buildings: a main library in Placerville, two large community branches in Cameron Park and South Lake Tahoe, two small branches in Georgetown and

Pollock Pines, a shared library in El Dorado Hills at the high school, and a bookmobile. All of the libraries, excluding the South Lake Tahoe branch library, are located in the western slope of the County (County 2003).

Other Public Facilities

The primary emergency medical facilities serving the western slope of the County are the main hospitals of Marshall Medical and Mercy Hospital of Folsom. Marshall Medical is an independent, nonprofit hospital serving the western slope of the County. The main hospital campus is located in Placerville, and numerous outpatient services are located in Placerville and Cameron Park. Mercy Hospital of Folsom, which is located in Sacramento County, serves El Dorado Hills and other communities on the west slope near Sacramento County. The nearest trauma centers are located in Sacramento County. UC Davis Medical Center and Mercy San Juan Hospital both operate trauma centers that serve El Dorado County (County 2003).

The first response to medical emergencies in the west slope is provided by CAL FIRE and the fire protection districts, each of which has an assigned response area. The first response may also be provided by EDSO, County Environmental Management Department (Hazardous Waste), California Highway Patrol, and trained search-and-rescue crews. All of these personnel provide basic life support.

CAL FIRE and some of the local fire protection districts in the County provide ambulance and paramedic services in El Dorado County. Because these agencies also provide fire protection services, their facilities house equipment, such as ambulances and fire engines, and staffing for both fire protection and emergency medical services.

Emergency air transportation is provided by the Cal Star out of Auburn (Placer County), Life Flight, Care Flight from Reno (Nevada), and Med Flight in Stockton (San Joaquin County).

4.15.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on public services in the project would:

1. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection, police protection, schools, parks, or other public facilities.

4.15.3 Impact Analysis

PS-1 The proposed project would not result in adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities.

The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband

infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public right-of-way (ROW).

Fire Protection

El Dorado County currently receives fire protection from 13 local fire districts and departments, CAL FIRE, and the USFS. The proposed Project would comply with the El Dorado County Fire Protection District ordinances regarding access and wildland fire protection. The potential for a minor increase in demand for fire services may occur during construction or maintenance of the Project; however, these minor public service demands would not overburden the El Dorado County Fire Protection District. Additionally, implementation of the proposed Project may increase individuals' access to telehealth, which could reduce the need for medical emergency response vehicles and demand for emergency response services. Therefore, the impact on fire protection services would be less than significant.

Police Protection

Police protection services are provided throughout the County by the El Dorado County Sheriff's Department, City of Placerville Police Department, City of South Lake Tahoe Police Department, and the Valley Division of the California Highway Patrol. The potential for a minor increase in demand for services may occur for police protection if a crime or accident occurs during construction or maintenance of the Project. However, these minor public service demands would not overburden the Sheriff's Department, City of Placerville Police Department, City of South Lake Tahoe Police Department, or the Valley Division of the California Highway Patrol. Therefore, the impact on police protection services would be less than significant.

Schools

Education in the County is provided through the County's 15 school districts and 67 schools, as well as two community colleges. As discussed in Section 4.14, *Population and Housing*, it is reasonable to assume that implementation of the proposed Project would contribute to the retention of existing residents and businesses, which could indirectly contribute to a limited amount of future growth. However, the potential for this growth would be limited and would not substantially induce the County population. Therefore, the proposed Project would not generate any additional residential population that would create demand for additional schools or increase attendance or enrollment at existing schools. Additionally, implementation of the proposed Project may increase individuals' access to virtual learning opportunities, which could reduce the demand for additional schools. Therefore, implementation of the proposed Project would not require the construction or expansion of school facilities, and no impact would occur.

Parks

As discussed in Section 4.16, *Recreation*, of this program EIR, recreation facilities within the County are overseen by the El Dorado County Parks and Recreation Department, the City of Placerville Recreation and Parks Division, and the City of South Lake Tahoe Parks and Recreation Department. Recreational opportunities for residents and visitors are provided by local parks and recreation service providers, federal and State agencies, and other recreation providers. As discussed in Section 4.14, *Population and Housing*, it is reasonable to assume that implementation of the proposed Project would contribute to the retention of existing residents and businesses, which could indirectly contribute to a limited amount

of future growth. However, the potential for this growth would be limited and would not substantially induce the County population. Therefore, no impact would occur to park and recreational facilities.

Other Public Facilities

As demonstrated above, the proposed Project would not generate an increased need for public services, such as fire or police protection, schools, or parks. In addition, construction of individual fiber projects would not physically alter existing government facilities such that service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities would be affected. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant.

4.15.4 Cumulative Impacts

PS-2 The proposed project would not result in a significant cumulative impact with respect to public services.

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in the County, would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities. Potential impacts to public services are evaluated on the level at which that public service is provided, which may be regional or more localized depending on the service. As discussed above under Impact PS-1, implementation of the proposed Project would result in a less than significant impact on public services.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. The vast majority of these cumulative transportation projects involve existing transportation infrastructure, and, in combination with the proposed Project, would not directly or indirectly induce substantial population growth.

All projects in El Dorado County, including the proposed Project and the cumulative projects considered in this analysis, would be subject to the General Plan policies of the applicable jurisdiction that prevent development in the County from exceeding acceptable service levels, which would ensure through the development review process that adequate public facilities and services are available to serve new development. Therefore, the impact would be less than cumulatively considerable.

Significance without Mitigation: Less than significant impact.

4.15.5 References

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4.16 RECREATION

This section describes the regulatory framework and existing conditions related to recreation resources and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on recreation were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to recreation.

4.16.1 Environmental Setting

4.16.1.1 Regulatory Framework

This section describes federal, State, and local environmental laws and policies that are relevant to the CEQA review process for recreation. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Federal Land Policy and Management Act

The Federal Land Policy and Management Act (FLPMA) was enacted in 1976 and governs the way in which public lands administered by the Bureau of Land Management (BLM) are managed. The FLPMA is the landmark legislation that provides a framework for managing federal land in perpetuity for the benefit of present and future generations. Under the FLPMA, public lands are to be managed "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use," (FLPMA 1976).

National Trails Systems Act

The National Trails Systems Act (16 USC 1241), enacted in 1968, created a series of national trails "to promote the preservation of public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the nation." This act established three types of trails, including the National Scenic Trails, National Recreation Trails, and connecting-and-side trails. The National Trails System currently consists of 30 National Scenic and Historic Trails and over 1,000 National Recreation Trails, and two connecting-and-side trails, with a total length of more than 50,000 miles. The National Trails provide recreational activities such as hiking, horseback riding, mountain biking, and camping.

National Park Service Management Policies

The National Park Service (NPS) Management Policies (2006) provide broad policy guidance for the management of units of the national park system. Topics include park planning, land protection, natural and cultural resource management, wilderness preservation and management, interpretation and education, recreational uses, special uses of the parks, park facilities design, and concessions management.

State Regulations

California Outdoor Recreation Plan

The California Outdoor Recreation Plan is the Statewide master plan for parks, outdoor recreation, and open space for California. The plan provides policy guidance to all outdoor recreation providers, including federal, State, local, and special district agencies that provide outdoor recreational lands, facilities and services throughout California.

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of El Dorado County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has land use authority within the basin.

TRPA Regional Plan

Recreation is addressed within the *Recreation Element* of the TRPA Regional Plan (TRPA 2024). The *Recreation Element* contains the following goal and policy that apply to the Project:

- **Goal R-3:** Provide a fair share of the total basin capacity for outdoor recreation. This goal addresses the need to reserve capacity for recreation-oriented types of development. Capacity will be reserved in terms of water supply, land coverage, and air and water quality. Public roads and transportation systems shall be managed to provide service to outdoor recreation areas.
 - **Policy R-3.2:** When reviewing projects that commit significant resources or services to non-outdoor recreational uses, TRPA shall be required to make written findings that sufficient resource capacity remains to obtain the recreation goals and policies of this plan. Based on estimated recreational development permitted by this plan, the Agency shall specify "fair share" estimates for the Region and for local areas of critical services and resources. No non-recreational projects may be approved that would rely on the utilization of such reserved capacities.

Local Regulations

El Dorado County Parks and Trails Master Plan

As directed by the Parks and Recreation Element of the 2004 El Dorado County General Plan, the El Dorado County Parks and Trails Master Plan was developed in 2012 to provide long term vision and direction for the planning, implementation, and management of west slope park and trail resources provided by El Dorado County for the benefit of residents and visitors. The purpose of the Master Plan is to coordinate with public and private recreation providers in El Dorado County and focus on areas where the County is the primary provider for parks and trails, while acknowledging the collaborative opportunities with special districts, local government, private businesses, State, and federal recreation providers (County 2012).

El Dorado County General Plan

Recreation is addressed within the *Parks and Recreation Element* of the County General Plan. The *Parks and Recreation Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2004):

- **Goal 9.1: Parks and Recreation Facilities.** Provide adequate recreation opportunities and facilities including developed regional and community parks, trails, and resource-based recreation areas for the health and welfare of all residents and visitors of El Dorado County.
 - **Objective 9.1.1: Park Acquisition and Development.** The County shall assume primary responsibility for the acquisition and development of regional parks and assist in the acquisition and development of neighborhood and community parks to serve County residents and visitors.
 - **Policy 9.1.1.1:** The County shall assist in the development of regional, community, and neighborhood parks, ensure a diverse range of recreational opportunities at a regional, community, and neighborhood level, and provide park design guidelines and development standards for park development. The following national standards shall be used as guidelines for the acquisition and development of park facilities (included as Table 4.16-1):

Table 4.16-1
GUIDELINES FOR ACQUISITION AND DEVELOPMENT OF PARK FACILITIES

Park Types	Developed
Regional Parks	1.5ac/1,000 population
Community Parks	1.5ac/1,000 population
Neighborhood Parks	2.0ac/1,000 population
<i>Specific Standards (Neighborhood and Community Parks)</i>	
Cameron Park, Community Services District	5.0 ac/1,000 population
El Dorado Hills, Community Services District	5.0 ac/1,000 population
Planned Communities	5.0 ac/1,000 population

Source: County 2004

- **Policy 9.1.1.2:** Neighborhood parks shall be primarily focused on serving walk-to or bike-to recreation needs. When possible, neighborhood parks should be adjacent to schools. Neighborhood parks are generally 2 to 10 acres in size and may include a playground, tot lot, turf areas, and picnic facilities.
 - **Policy 9.1.1.3:** Community parks and recreation facilities shall provide a focal point and gathering place for the larger community. Community parks are generally 10 to 44 acres in size, are for use by all sectors and age groups, and may include multi-purpose fields, ball fields, group picnic areas, playground, tot lot, multi-purpose hardcourts, swimming pool, tennis courts, and a community center.
 - **Policy 9.1.1.4:** Regional parks and recreation facilities shall incorporate natural resources such as lakes and creeks and serve a region involving more than one community. Regional parks generally range in size from 30 to 10,000 acres with the preferred size being several hundred acres. Facilities may include multi-purpose fields, ball fields, group picnic areas, playgrounds, swimming facilities, amphitheaters, tennis courts, multi-purpose hardcourts, shooting sports facilities, concessionaire facilities, trails, nature interpretive centers, campgrounds, natural or historic points of interest, and community multi-purpose centers.
- **Objective 9.1.2: County Trails.** Provide for a County-wide, non-motorized, multi-purpose trail system and trail linkages to existing and proposed local, State, and Federal trail systems. The County will actively seek to establish trail linkages between schools, parks, residential, commercial, and industrial uses and to coordinate this non-motorized system with the vehicular circulation system.
- **Policy 9.1.2.2:** The standards for the County trail system regarding general location, width, steepness, signage, offer of easement dedication, and other design standards are detailed in the Hiking and Equestrian Trails Master Plan and should be updated, as necessary.
 - **Policy 9.1.2.3:** The County will assume the responsibility, where possible, of acquiring and developing regional trails outside the boundaries of the cities, Community Service Districts, and park and recreation districts having park and recreation taxing authority and will assist areas such as the Georgetown Divide Recreation District with exceptionally large geographic areas with acquisition and development of trails.
 - **Policy 9.1.2.4:** Evaluate every discretionary application as well as public facilities planning with regard to their ability to implement the Hiking and Equestrian Trails Master Plan and the Bikeway Master Plan.
 - **Policy 9.1.2.5:** All discretionary applications may be conditioned to provide an irrevocable offer of a trail easement dedication and construction of trails as designated on the Trails Master Plan provided it can be shown that such trails will serve as loops and/or links to designated or existing trails, existing or proposed schools, public parks and open space areas, and existing or proposed

public transit nodes (e.g., bus stops, park and ride lots). Parkland dedication credit shall be given where applicable for provision of land and trail improvements that aid in implementing the Trails Master Plan.

- **Objective 9.1.5: Recreation Coordination.** Coordinate future park and trail planning and development with Federal, State, cities, community service districts, school districts, and other recreation agencies and districts to provide increased recreation opportunities through shared use of facilities, continuity and efficiency of operation, and a more coordinated and balanced park system.
 - **Policy 9.1.5.1:** Encourage the formation of independent rural recreation districts to provide rural community and neighborhood parks for those areas desiring a higher level of service.
- **Goal 9.2: Funding.** Secure an adequate and stable source of funding to implement a comprehensive County-wide parks and recreation plan.
 - **Objective 9.2.2: Quimby Act.** Land dedicated to the County under the Quimby Act and Quimby in-lieu fees shall continue to be used primarily to meet neighborhood park needs but may assist in meeting the community park standards as well.
 - **Policy 9.2.2.5:** The County shall establish a development fee program applicable to all new development to fund park and recreation improvements and acquisition of parklands such that minimum neighborhood, community, and regional park standards are achieved. This fee is in addition to Quimby Act requirements that address parkland acquisition only. The fee will be adjusted periodically to fully fund the improvements identified in the Parks and Capital Improvement Program concurrent with development over a five-year period.
- **Implementation Measure PR-B:** Develop and implement a program to identify and pursue alternative methods to fund and/or support the acquisition and operation of parks and recreation facilities, including raw land. Funds may be used by the Airports, Parks, and Grounds Division of the County General Services Department or transferred to other public parks and recreation providers as deemed appropriate. [Policy 9.2.2.5]
- **Implementation Measure PR-C:** Update the Bikeway Master Plan and Hiking and Equestrian Trails Master Plan. Both plans shall contain provisions for regular plan monitoring and updating. [Policies 9.1.2.2 and 9.1.2.3]
- **Implementation Measure PR-F:** Develop a program to facilitate the formation of independent recreation districts. The program should include coordination with the Local Agency Formation Commission. [Policy 9.1.5.1]
- **Implementation Measure PR-H:** Develop and implement a parks and recreation fee program that addresses the following:
 - A. For projects subject to Quimby Act requirements, additional fees for the actual construction and maintenance of parks and recreation facilities;

- B. For projects not subject to Quimby Act requirements, fees for the acquisition of parkland and for the construction and maintenance of parks and recreation facilities; and
- C. Coordination with local parks and recreation providers regarding fee collection and disbursement to those providers.

Placerville Area Parks and Recreation Master Plan

The Placerville Area Parks and Recreation Master Plan was adopted in 2009 and updated in 2017 to include the change in inventory of facilities, recreation program participation, demographics, and levels of service that are expressed as a function of population. The purpose of this update is to provide specific guidance for the City of Placerville and supporting analysis for El Dorado County to manage and develop new facilities and recreation programs to meet the needs of the current and future population. The Master Plan update includes a comprehensive set of planning standards which are intended to guide future park development.

The Master Plan Update also includes information about the El Dorado County parks that serve residents of Placerville and the surrounding unincorporated areas of El Dorado County. The unincorporated areas addressed in this planning effort includes the unincorporated communities of Coloma, Lotus, Gold Hill, Diamond Springs, Camino, Pollock Pines, and portions of Rescue (City of Placerville 2017).

City of Placerville General Plan

Recreation is addressed within *Section IV – Public Facilities and Services* of the City of Placerville General Plan (City of Placerville 2004). The *Public Facilities and Services* section contains the following goal and policies that apply to the Project:

- **Goal D:** To establish and maintain a park system and recreation program that are suited to the needs of Placerville residents and visitors.
 - **Policy 2:** City of Placerville park acquisition and development efforts shall be based on a goal of five acres of usable developed neighborhood and community parkland per 1,000 residents within the City limits.
 - **Policy 3:** The City of Placerville shall continue to assess park development fees on all new residential development sufficient to fund citywide park improvements.

City of South Lake Tahoe Recreation Facilities Master Plan

The South Lake Tahoe Alliance for Recreation Facilities Master Plan was prepared in September 1998 in response to the need for a comprehensive look at the recreation situation facing South Lake Tahoe. The Master Plan inventoried existing facilities and identified the demand or need for additional facilities. The plan recognized that there is a need for additional public recreation facilities, especially given the fact that most athletic fields are located on school grounds and not within appropriate funding mechanisms to accomplish those goals. The five areas identified for recreational development were located near the following landmarks: Sierra Boulevard, Meyers Landfill, Zephyr Cove, Lake Tahoe Community College, and Tahoe Paradise Resort (City of South Lake Tahoe 2010).

City of South Lake Tahoe General Plan

Recreation is addressed within the *Recreation and Open Space Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Recreation and Open Space Element* contains the following goal, policies, and implementation program that apply to the Project:

- **Goal ROS-1:** To maintain and expand South Lake Tahoe’s public park system and recreational opportunities to meet the needs of residents, employees, and visitors.
 - **Policy ROS-1.1: Recreational Services.** The City of South Lake Tahoe shall design and develop recreational services to promote full use of recreational facilities within their design capacity.
 - **Policy ROS-1.9: Interconnected Public Recreation and Open Space System.** The City of South Lake Tahoe shall develop an interconnected system of open spaces, community parks, plazas, bike and pedestrian trails, and other types of public and private spaces as part of new development and redevelopment of existing sites.
- **Implementation Program IMP-6.1: Recreation Facilities Master Plan (MPSP).** The City of South Lake Tahoe shall regularly update the Recreation Facilities Master Plan to reflect the recreational needs of South Lake Tahoe residents and visitors. [Policy ROS-1.1 and ROS-1.9]

4.16.1.2 Existing Conditions

Recreation Service Providers

Recreation facilities within the County are overseen by the El Dorado County Parks and Recreation Department, the City of Placerville Recreation and Parks Division, and the City of South Lake Tahoe Parks and Recreation Department. The diverse natural characteristics of El Dorado County promote a wide range of recreational opportunities for residents and visitors, which are provided by local parks and recreation service providers, federal and State agencies, and other recreation providers. Many of the recreational resources located in the County have been developed by State and federal public agencies on public lands that are not directly subject to the County’s General Plan (County 2003).

The following sections provide information on the recreation service providers in El Dorado County and the existing inventory of parks and other recreation facilities.

El Dorado County Parks and Recreation Department

The County Parks and Recreation Department oversees the development and maintenance of recreational opportunities within the County and serves as a policy advisory group on parks and recreation issues. The commission is a five-person body with one appointee from each of the five supervisorial districts. The commission is responsible for helping establish a regional park system and advises the Board of Supervisors on parks and recreation matters, as necessary. The commission also oversees the development and maintenance of recreational resources within the County and works closely with local service providers (County 2003).

The 2012 El Dorado County Parks and Trails Master Plan implements the guideline of five acres of park land for every 1,000 people in the Plan Area, as recommended in the County General Plan. This acreage

is divided between regional, community, and neighborhood parks. Communities within the Plan Area that receive park services primarily from an entity other than El Dorado County are identified separately. These include the City of Placerville, the City of South Lake Tahoe, the Georgetown Divide Recreation District, the El Dorado Hills Community Service District, and the Cameron Park Community Service District. The population of the Plan Area in 2012, defined as those areas of western El Dorado County that are not within the boundaries of a local parks provider, was 71,603 people. Within the Plan Area, the Master Plan identified 73 acres of developed community park, 57 acres of developed regional parks, and an additional 115 acres of undeveloped regional park land (County 2012).

City of Placerville Recreation and Parks Division

The City of Placerville Recreation and Parks Commission is a six-member commission made up of five community members at large, appointed by the Placerville City Council and one student representative from El Dorado High School. The Recreation and Parks Commission acts in an advisory capacity to the Placerville City Council and the Director of Community Services in all matters pertaining to parks and public recreation as the City works to deliver quality parks and leisure services to the community. The commission is a sounding board for community issues related to recreation and parks matters. In addition, the commission is charged to work in a cooperative effort with other governmental agencies and civic groups in the advancement of sound park and recreation planning and programming (City of Placerville 2024).

The City of Placerville updated the Placerville Area Parks and Recreation Facilities Master Plan in 2017. The Master Plan Update implements a standard of five acres per 1,000 people of useable developed park land for neighborhood and community parks in the Plan Area, in accordance with the City of Placerville General Plan. The Plan Area is defined as the City of Placerville and the surrounding unincorporated area of El Dorado County, including the communities of Coloma, Lotus, Gold Hill, Diamond Springs, Camino, Pollock Pines, and portions of Rescue. The population of the Plan Area in 2017 was 61,431, and existing recreation facilities totaled 234.8 acres. In the City of Placerville alone, there were 98.3 acres (City of Placerville 2017).

City of South Lake Tahoe Parks and Recreation Department

The City of South Lake Tahoe Parks and Recreation Department oversees and plans improvements to community parks, recreational facilities, and programs (City of South Lake Tahoe 2024).

The City of South Lake Tahoe General Plan Environmental Impact Report (EIR) was prepared in 2010. The EIR describes goals and policies pertinent to recreational resources in the City of South Lake Tahoe General Plan Planning Area and identifies the major park and recreation facilities that are operated and maintained by the City of South Lake Tahoe Parks and Recreation Department. According to the EIR, approximately 258 acres within the City limits were used for recreational purposes during the time the EIR was prepared; therefore, based on the City's population of 23,725 during the planning period, parkland and recreational facilities were provided to City residents at a ratio of approximately 10 acres per 1,000 persons. This ratio is double the Quimby Act standard and the El Dorado County General Plan Standard of five acres per 1,000 persons (City of South Lake Tahoe 2010).

Local Recreation Service Providers

The responsibility of local park planning and development generally falls under the jurisdiction of local community service districts (CSDs), or other local parks and recreation districts, which serve distinct

subareas of the County. The El Dorado Hills CSD, Cameron Park CSD, and Georgetown Divide Recreation District are all non-County public agencies that provide recreational opportunities and facilities within the County (County 2012).

El Dorado Hills Community Service District

The El Dorado Hills Community Service District (EDHCSD), formed in 1962 by Resolution #98-62, is the primary provider of park, recreation, and open space services to the El Dorado Hills area. The EDHCSD maintains a standard of 5 acres of parkland for every 1,000 persons within its district boundaries. Based on the 2021 Master Plan (Revised March 14, 2024), the EDHCSD maintains over 500 acres of parks, trails, and facilities. The EDHCSD service area is approximately 18,079 and serves a population of over 45,000 residents (EDHCSD 2024).

Cameron Park Community Service District

The Cameron Park Community Service District (CPCSD) provides park and recreation services in the Cameron Park area. The CPCSD maintains a standard of 5 acres of parkland for every 1,000 persons within its district boundaries. According to the 2014 CPCSD Parks and Recreation Master Plan Update, CPCSD has 14 parks and recreation facilities distributed throughout the CPCSD service area, which comprises about 4,303 acres. It is estimated that the population of the CPCSD in 2013 was 18,986. These parks comprise a total of 143.1 acres, of which about two-thirds (96.3 acres) is improved for recreation use (CPCSD 2014).

Georgetown Divide Recreation District

The purpose of the Georgetown Divide Recreation District (GDRD) is to provide recreational sites, facilities, and programs in the Georgetown Divide area. According to the County General Plan, the GDRD boundaries cover about 412 square miles or nearly 23% of the entire area of El Dorado County and are nearly coterminous with the Black Oak Mine Unified School District. Specific functions of the district are to acquire, develop, maintain, and operate parks, recreational facilities and programs, and preserve natural and historic resources. The GDRD was created by the voters of the district in November 1988. The GDRD does not have established parkland standards or an adopted master plan. Approximately 18.5 acres of developed parkland are administered by the GDRD (County 2003).

Recreation on Federal Lands

Federal lands provide abundant recreation opportunities to residents in El Dorado County. Recreation on federal lands in the County is provided primarily by the U.S. Forest Service (USFS), BLM, and the National Park Service (NPS), as discussed in further detail below.

U.S. Forest Service

National Forest lands managed by the USFS, under the U.S. Department of Agriculture, include the Eldorado National Forest, Tahoe National Forest, and lands under the purview of the Lake Tahoe Basin Management Unit. The Eldorado National Forest offers numerous recreational opportunities including campgrounds, fishing, swimming, hiking trails, biking, equestrian trails, motorized trails, white water rafting, hunting, rock climbing, target shooting, day use areas and campgrounds. Popular summertime destinations within the National Forest include Union Valley and Icehouse Reservoirs, Loon Lake, Silver Lake, Caples Lake, Wrights Lake, Horsetail Falls, and Desolation Wilderness. The Pacific Crest Trail runs

from Mexico to Canada, crossing through El Dorado County in the upper Truckee River valley north of Caples Lake. The Crystal Basin Recreation Area, located in the Eldorado National Forest and operated by the Sacramento Municipal Utilities District (SMUD), encompasses 85,000 acres of pine and fir forests along the western slopes of the Sierra Nevada. Several destinations within the Crystal Basin Recreation Area provide access to trails within the Desolation Wilderness and other nearby areas. Wrights and Loon Lakes are popular camping and staging areas for forays into the Wilderness. Just south of Sly Park Recreation Area, Fleming Meadows contains approximately 9 miles of trails (County 2012).

Bureau of Land Management

Under the U.S. Department of the Interior, BLM owns and manages large tracts of forested lands in the American and Cosumnes River canyons. BLM provides numerous recreation facilities in El Dorado County. Approximately 12 miles of unpaved trail are located within Cronan Ranch Regional Trails Park, a 1,400-acre open space along the South Fork of the American River which was acquired for public use by the American River Conservancy, BLM, El Dorado County, and other partners. The Dave Moore Nature Area is a BLM facility located on the South Fork of the American River two miles west of Coloma. It includes an accessible mile-long loop trail from the parking area to the river, passing through several habitats. The Pine Hill Preserve encompasses 4,042 acres in 5 non-contiguous units ranging in size from 222 acres to 2,999 acres. The preserve was established to protect habitat for eight rare plant species, several of which are found nowhere else in the world. BLM also holds custodial ownership of the 695-acre Kanaka Valley, a wildlife corridor that links federal and State public lands along the South Fork American River and the Pine Hill Preserve. Trails on other BLM holdings on the South Fork of the American River include the Red Shack Trail connecting State Route 49 to the river below Chili Bar, and a rough trail within the 233-acre Wildman Hill acquisition on the north side of river canyon (County 2012).

National Park Service

NPS has designated two National Historic Trail (NHT) alignments that pass through El Dorado County: the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express National Historic Trail commemorates the route used to relay mail via horseback from Missouri to California before the advent of the telegraph. In western El Dorado County both trails generally follow routes adjacent to the U.S. Highway 50 corridor to Mother Lode Drive and Pleasant Valley Road to the community of Diamond Springs. These trails are not expressly maintained by the National Park Service for recreational use. Where the trails pass through federal lands, as in the Eldorado National Forest, the federal land manager oversees recreational uses. These portions of both the Pony Express NHT and the California NHT are open for various types of public trail use. Remaining segments that traverse private property or occupy the same alignment as improved vehicular roads are typically not available for public use, unless public road improvements have included trail improvements in the corridor (County 2012).

Recreation on State Lands

Lands under State agency jurisdiction also provide recreational opportunities to County residents. The California Department of Parks and Recreation and the California Tahoe Conservancy are the primary State recreation providers.

California Department of Parks and Recreation

The California Department of Parks and Recreation (State Parks) owns and/or manages a number of recreational areas in the County, including Folsom Lake State Recreation Area and Folsom Reservoir, Auburn State Recreation Area, Marshall Gold Discovery State Historic Park, Sugar Pine Point State Park, D.L. Bliss State Park, Emerald Bay State Park, Washoe Meadows State Park, and the Lake Valley State Recreation Area. Many of these State Park units are located in the Lake Tahoe Basin. Recreational areas managed by State Parks typically provide developed facilities (e.g., campgrounds) and dispersed recreation opportunities (e.g., hiking, boating, etc.; County 2003).

California Tahoe Conservancy

The California Tahoe Conservancy (Conservancy) is an independent State agency within the Resources Agency of the State of California. It was established to develop and implement programs to improve water quality in Lake Tahoe, preserve the scenic beauty and recreational opportunities of the Lake Tahoe Basin, provide public access, preserve wildlife habitat areas, and manage and restore lands to protect the natural environment. The Conservancy's Public Access and Recreation Program aims to provide new access to the lake and other natural areas in the Lake Tahoe Basin; to expand access opportunities by providing parking and restroom facilities and other improvements at existing sites; to connect existing facilities with hiking, biking, and cross-country ski trails; and to provide visitor information services (County 2003).

Other Recreation Providers

As an independent public utility provider, the El Dorado Irrigation District (EID) also provides recreation opportunities in the County. EID owns, operates, and maintains the Sly Park Recreation Area located at the U.S. Bureau of Reclamation's Jenkinson Lake near Pollock Pines, which provides developed recreational opportunities (e.g., campgrounds, boat ramps) as well as dispersed recreational opportunities (e.g., hiking, biking, and equestrian trails) on approximately 2,000 acres. Forebay Reservoir, a small day-use facility, is also located in Pollock Pines and is managed by EID. EID operates seasonal facilities at the Silver West Lake Campground and Caples Lake along Highway 88, which are located in Amador County and Alpine County, respectively (EID 2024).

4.16.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact to recreation resources if the Project would:

1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.16.3 Impact Analysis

REC-1 The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

REC-2 The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The proposed Project would install fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public rights-of-way (ROW). As discussed in Section 4.14, *Population and Housing*, it is reasonable to assume that implementation of the proposed Project would contribute to the retention of existing residents and businesses, which could indirectly contribute to a limited amount of future growth. However, the potential for this growth would be very limited and would not substantially induce the County population. As such, the proposed Project would not generate an increased use of neighborhood or regional parks or other recreational facilities. Additionally, implementation of the proposed Project would not include or require the construction or expansion of recreational facilities. Therefore, no impact on recreation would occur for Impact REC-1 and REC-2.

Significance without Mitigation: No impact.

4.16.4 Cumulative Impacts

REC-3 The proposed project would not result in a significant cumulative impact with respect to recreation.

Cumulative impacts would occur when the proposed Project, in combination with the other projects in the County, would result in an increased use of parks and recreational facilities such that substantial physical deterioration of the facility would occur, or if the projects would include the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Potential impacts to recreation are evaluated at the regional level. As discussed above under Impact REC-1 and REC-2, implementation of the proposed Project would result in no impact on recreational facilities.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Each cumulative project could result in a small but incremental impact on recreational facilities. As discussed above, the proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse impact on the environment. All projects in the County, including the cumulative projects included in this analysis, would be required to comply with the goals, policies, and implementation measures of the applicable jurisdictions' general plan that

would require the provision of adequate recreational facilities and/or parkland for residents. Therefore, no cumulatively considerable impact would occur.

Significance without Mitigation: No impact.

4.16.5 References

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4.17 TRANSPORTATION

This section describes the regulatory framework and existing transportation systems, and traffic conditions related to the proposed Project, evaluates the potential impacts that could occur as a result of implementation of the proposed Project, including potential impacts to intersections, roadway segments, pedestrian and bicycle facilities, and transit service, and details mitigation measures needed to reduce significant impacts, as necessary. The potential effects on transportation were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance.

On September 25, 2024, the California Department of Transportation (Caltrans) sent a letter to El Dorado County Economic Development Department to provide comments on the El Dorado County Broadband Fiber Project Environmental Impact Report (EIR). Caltrans noted that if any future project activities encroach into Caltrans right-of-way (ROW), the project proponent must apply for an Encroachment Permit with the Caltrans District 3 Encroachment Permit Office. The Notice of Preparation (NOP) public comments letters are included in Appendix C.

4.17.1 Environmental Setting

4.17.1.1 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for transportation and circulation. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Code of Federal Regulations

Code of Federal Regulations (CFR) Title 49, Subtitle B, provides guidelines pertaining to interstate and intrastate transport of goods and hazardous materials and substances, as well as safety measures for motor carriers and motor vehicles that operate of public highways. The primary transportation corridors within the County are State Routes (SRs) 49, 108, 120, 132 and Federal Route U.S. Highway 50 (U.S. 50).

CFR Title 23, Part 658 prescribes national policies that govern truck sizes and weights on the national network of highways based on the Surface Transportation Assistance Act. The maximum length of a semitrailer operating in a truck tractor-semitrailer combination is 48 feet. The maximum length of a semitrailer or trailer operating in a truck tractor, semitrailer-trailer combination, is 28 feet. The maximum width of vehicles operating on the national network is 102 inches (except for mobile home transport, which requires a special permit). The maximum gross vehicle weight is 80,000 pounds.

U.S. Department of Agriculture – Forest Service Special Use Permit

Work on transportation facilities that occurs on National Forest System lands outside of a highway ROW requires a temporary construction special use permit. If structures are proposed outside of the existing highway ROW, perfection of the ROW may occur.

State Regulations

California Department of Transportation

Caltrans is a State agency overseeing State highway, bridge, and rail transportation planning, as well as construction, maintenance, and operation. For administrative purposes, Caltrans divides the State into 12 districts, supervised by district offices. El Dorado County is located within Caltrans District 3 which is headquartered in the City of Marysville, Yuba County. Caltrans requires an encroachment permit for non-transportation activities, including utility construction, occurring within the rights-of-way (ROW) of the State highway system. Caltrans also requires transportation permits for the movement of vehicles or loads exceeding the size and weight limitations of the California Vehicle Code.

State Improvement Program

The California Transportation Commission (CTC) is responsible for the programming and allocating of funds for the construction of highway, passenger rail, and transit improvements throughout California. The CTC also advises and assists the Secretary of the California State Transportation Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs. The CTC is an active participant in the initiation and development of State and Federal legislation that seeks to secure financial stability for the State's transportation needs.

California Transportation Plan 2050

The California Transportation Plan 2050 (CTP) was adopted in February 2021. CTP, which is overseen by Caltrans, serves as a blueprint for California's transportation system, as defined by goals, policies, and strategies to meet the State's future mobility needs. The goals defined by CTP fall into three categories: social equity, prosperous economy, and quality environment. Each goal is tied to performance measures. In turn, members from regional and metropolitan planning organizations (MPO) report these performance measures to Caltrans.

California Streets and Highways Code

The California Streets and Highways Code contains regulations for the care and protection of state and County highways and specifies that permits issued by Caltrans be required for roadway encroachment during truck transportation and delivery, as well as loads that exceed Caltrans' weight, length, or width standards for public roadways. The code also requires permits for utilities constructed within the right-of-way of a public highway.

California Vehicle Code

The California Vehicle Code contains several regulations regarding the safe transport of hazardous materials, hazardous waste, and explosive materials. It also provides weight guidelines and excessive load restrictions for vehicles traveling on highways.

Senate Bill 375

SB 375 provides guidance regarding curbing emissions from cars and light trucks to help the State comply with Assembly Bill (AB 32). There are four major components to SB 375. First, SB 375 requires regional GHG emissions targets. The CARB Regional Targets Advisory Committee guides the adoption of targets to be met by 2020 and 2035 for each MPO in the State. These targets, which MPOs may propose

themselves, must be updated every 8 years in conjunction with the revision schedule of the housing and transportation elements of local general plans. Second, the MPOs are required to create a sustainable communities strategy (SCS) that provides a plan for meeting regional targets. The SCS and the regional transportation plan (RTP) must be consistent, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an alternative planning strategy that details an alternative plan for meeting the target. Third, SB 375 requires a planning strategy that details an alternative plan for meeting the target. SB 375 requires regional housing elements and transportation plans to be synchronized on 8 year schedules. In addition, regional housing needs allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years of adoption of the housing element. Finally, MPOs must use transportation and air emissions modeling techniques that are consistent with the guidelines prepared by the CTC. Regional transportation planning agencies, cities, and counties are encouraged, but not required, to use travel demand models that are consistent with CTC guidelines.

Public Resources Code Section 21099(b)(1) (Senate Bill 743)

Public Resources Code (PRC) Section 21099(b)(1) requires the Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines, thereby establishing criteria for determining the significance of transportation impacts from projects that “promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses.” PRC Section 21099(b)(2) states that, upon certification of the revised guidelines for determining transportation impacts, pursuant to Section 21099(b)(1), automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity, or vehicular traffic congestion shall not be considered a significant impact on the environment under CEQA. In response to PRC Section 21099(b)(2), CEQA Guidelines Section 15064.3 notes that “Generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts.” The Guidelines section further states that although a lead agency may elect to be governed by this section immediately, lead agencies are not required to utilize VMT as the metric to determine transportation impacts until July 1, 2020. These changes to the CEQA guidelines and statutes are now in effect. This shift in transportation impact criteria is expected to better align transportation impact analysis and mitigation outcomes with the State’s goals to reduce GHG emissions, encourage infill development, and improve public health through more active transportation.

Previously, LOS was used to measure the average amount of delay experienced by motorists at an intersection during the most congested peak morning and evening times of day, while the new metric – VMT – measures the total number of daily miles traveled by vehicles on the roadway network. SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts on drivers to measuring the impact of driving.

In December 2018, OPR published the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), which contains OPR’s technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. This Technical Advisory provides screening criteria for certain project types, including a daily trip threshold to define “small projects” with respect to their potential to result in significant transportation effects (OPR 2018).

The Technical Advisory recommends VMT significance thresholds for different project types not meeting the screening criteria. The VMT level is commonly assessed using an efficiency metric, such as VMT per capita or VMT per service population. Lead agencies have the discretion to set thresholds of significance or apply thresholds on a case-by-case basis.

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Regional Transportation Plan

The Lake Tahoe Region is a unique transportation planning landscape. It includes federal lands, the states of California and Nevada and their respective transportation departments, El Dorado, Placer, Douglas, and Washoe counties, the City of South Lake Tahoe, the Tahoe Transportation District, and multiple public utility districts, improvement districts, and land management agencies. The 2020 RTP outlines strategies for improving transportation infrastructure and services in the Lake Tahoe Region and addresses objectives such as improving mobility, reducing congestion, and minimizing environmental impacts. The 2020 RTP satisfies three distinct transportation planning authorities: the TRPA Bi-State Compact, the federal metropolitan planning organization designation, and the State of California Regional Transportation Planning Agency (TRPA 2021).

The TRPA Compact mandates the establishment of threshold standards and plans to attain and maintain them. The threshold standards address nine key resource areas: Water quality, air quality, scenic resources, soil conservation, fisheries, vegetation, wildlife, noise, and recreation. The 2020 RTP, in its implementation, is a threshold attainment plan. TRPA is presently updating its air quality thresholds, including the VMT threshold, to align with State mobile source GHG emission reduction policies and targets and more closely link the plan's vision and the Regional Plan goals (TRPA 2021).

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 65, *Air Quality/Transportation*, implements the Goals and Policies of the Air Quality Subelement for the purpose of attaining and maintaining applicable state and federal air quality standards and TRPA thresholds. Additionally, this ordinance provides information as it relates to screening projects from further transportation analysis, standards of significance, VMT metrics, and the overall transportation impact assessment process and requirements. As outlined in Subparagraph 65.2.3.D, some projects are presumed to result in a less than significant VMT impact absent any evidence to the contrary. The following screening criteria are potentially applicable to the Project:

- Projects Generating Low VMT: Projects will be screened from further transportation analysis using the following vehicle miles traveled calculations:
 - 1,300 in-Basin VMT within town centers and the half-mile buffer around them.

- 715 in-Basin VMT in all other areas.

The TRPA Code requires that projects that involve more than 650 daily VMT must describe and evaluate the significance of all impacts in the Initial Environmental Checklist. A project that is not screened out must analyze whether it meets the standard of significance.

TRPA Regional Plan

Transportation is addressed within the *Transportation Element* of the TRPA Regional Plan (TRPA 2024b). The *Transportation Element* contains the following goals and policies that apply to the Project:

- **Goal 2: Connectivity.** Enhance and sustain the connectivity and accessibility of the Tahoe transportation system, across and between modes, communities, and neighboring regions, for people and goods.
 - **Policy 2.15:** Develop and maintain an Active Transportation Plan as part of the RTP. Include policies, a project list of existing and proposed bicycle and pedestrian facilities, and strategies for implementation in the Active Transportation Plan.
 - **Policy 2.16:** Incorporate programs and policies of the active transportation plan into regional and local land use plans and regulatory processes.
 - **Policy 2.17:** Construct, upgrade, and maintain pedestrian and bicycle facilities consistent with the active transportation plan.
- **Goal 3: Safety.** Increase safety and security for all users of Tahoe’s transportation system.
 - **Policy 3.4:** Support emergency preparedness and response planning, including the development of regional evacuation plans.
- **Goal 4: Operations and Congestion Management.** Provide an efficient transportation network through coordinated operations, system management, technology, monitoring, and targeted investments.
 - **Policy 4.11:** LOS criteria for the Region’s highway system and signalized intersections during peak periods shall be: “C” on rural recreational/scenic roads; “D” on rural developed area roads; “D” on urban developed area roads; “D” for signalized intersections. Level of Service “E” may be acceptable during peak periods in urban areas, but not to exceed four hours per day. These vehicle LOS standards may be exceeded when provisions for multi-modal amenities and/or services (such as transit, bicycling, and walking facilities) are adequate to provide mobility for users at a level that is proportional to the project-generated traffic in relation to overall traffic conditions on affected roadways.

Local Regulations

El Dorado County Transportation Commission

The El Dorado County Transportation Commission (EDCTC) was designated as the Regional Transportation Planning Agency (RTPA) for El Dorado County on July 23, 1975. As the RTPA, the EDCTC serves as the planning and programming authority for transportation projects on the western slope of El Dorado County, excluding those areas within the TRPA boundaries. In 2008, the EDCTC was designated as the Airport Land Use Commission for the Placerville, Georgetown, and Cameron Park Airports. The EDCTC also manages the Freeway Service Patrol for U.S. Highway (U.S. 50) 50 in El Dorado County.

EDCTC prepares the Regional Transportation Plan RTP and Regional Transportation Improvement Program (RTIP) for the Western Slope of El Dorado County (excluding the Tahoe Basin). EDCTC is also responsible for the administration of Transportation Development Act funds for El Dorado County jurisdictions, excluding the portion of the County within the Tahoe Regional Planning Agency boundaries.

El Dorado County Regional Transportation Plan

EDCTC is the RTPA for El Dorado County, excluding the portion of the County in the Lake Tahoe Basin. The County's current 2020-2040 RTP was adopted in 2020 under the direction of the EDCTC. The RTP is designed to be a guide for the systematic development of a balanced, comprehensive, multi-modal transportation system. This system includes but is not limited to: highways, streets and interregional roadways, public transit, aviation, freight/goods movement, active transportation (bikeways and pedestrian facilities), transportation systems management, and intelligent transportation systems. The RTP is action oriented and pragmatic, considering both the short-term (up to 10 years) and long-term (10 to 20 year) periods (EDCTC 2020a).

EL Dorado County Active Transportation Plan

The El Dorado County Active Transportation Plan was developed in February 2020 as a guiding document to help the County build a balanced transportation system that supports and encourages active modes of travel. The Active Transportation Plan analyzes existing conditions and provides recommendations to improve active transportation within the County, as well as providing objectives and strategies to ensure that the recommendations are feasible (EDCTC 2020b).

Coloma Sustainable Community Mobility Plan

The Coloma Sustainable Community Mobility Plan, also called the Coloma-Lotus Mobility Plan (CLMP), identified a prioritized list of supportive infrastructure treatments to provide safe, low-stress connectivity and accessibility between key points of interest, including residential neighborhoods, employment centers, shopping centers, schools, multi-modal connections, and recreation hubs. The CLMP is a guiding document to aid decision-makers in the funding and implementation of multimodal improvements to enhance the safety and efficiency of the Coloma-Lotus transportation system. Although the plan focuses on active transportation infrastructure, all road users are considered. The CLMP provides an assessment of baseline conditions, presents study area improvement concepts, and integrates a variety of performance metrics to determine the return-on-investment of the proposed expenditures (EDCTC 2019a).

El Dorado County Safe Routes to Schools – Walkability and Bikeability Audits

In Fall of 2007, the EDCTC submitted a grant request to the Federal Safe Routes to School Program to conduct Walkability and Bikeability Audits of all public schools located on the western slope of El Dorado County. This project documents the existing conditions and facilities available for walking and bicycling near the public schools in the County. Potential improvements, projects, and programs are identified for the purpose of implementation. Proposed projects are prioritized based on walkability rankings established during the audits. This document identifies the areas in need of improvements and establishes which schools have the potential for increases in walking and bicycling to school and serves as the first step in implementing a Safe Routes to Schools program in El Dorado County (EDCTC 2008).

Western El Dorado County Short- and Long-Range Transit Plan

The El Dorado County Transit Authority (El Dorado Transit) provides a variety of fixed-route and demand response transit services throughout western El Dorado County, as well as commuter services to Sacramento County. The Western El Dorado County Short- and Long-Range Transit Plan was developed in 2019 by EDCTC and El Dorado Transit and outlines the highest-priority transit projects over the next 25 years by organizing into two elements. The short-range element, prepared in January 2024, provides a detailed five-year plan and includes steps towards accomplishing the goals of the November 2019 long-range element, which focuses on strategies for public transportation in western El Dorado County over the next 25 years (EDCTC 2019b).

El Dorado County Office of Emergency Services

The County's Office of Emergency Services (OES) is managed by the County Sheriff's Office and coordinates overall response through the Emergency Operations Center (EOC). In addition to State coordination, OES collaborates with the County's fire districts, emergency medical services agency, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills. OES updates and maintains local emergency response plans, provides Countywide training and exercises to the County, offers active violence training to County agencies and schools, maintains and exercises the emergency notification systems, and provides public education and information on preparing for disasters. In 1994, the County Board of Supervisors designated the Sheriff's Office the responsibility for managing the County's OES. Sheriff's Office employees assigned to the OES work in collaboration with Fire services, Emergency Medical Services, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills (County 2003; County 2024b).

The County OES provides emergency alerts through the El Dorado County Emergency Alerts powered by Rave. The County OES recently implemented Perimeter Platform to improve emergency operations and communication channels with the public during critical situations. Although the Perimeter Platform is not an alerting platform, it provides vital information for residents during crises, particularly wildfires (County 2024b).

El Dorado County Emergency Operations Plan

The El Dorado County Emergency Operations Plan (EOP) serves as the official emergency plan document in the County. The EOP was revised in 2023 to bring it into compliance with the California Emergency Services Act, the Standardized Emergency Management System (SEMS), and the federal National Incident Management System (NIMS). The EOP is the principal guide for the agencies of El Dorado

County and other local government entities to prevent, prepare, respond, and recover from emergencies disasters affecting El Dorado County. Secondly, this plan is intended to facilitate multi-agency and multi-jurisdictional coordination, particularly between local, State, and federal agencies in emergency operations (County 2024b).

El Dorado County Transportation Impact Study Protocols and Procedures

In 2008, the County Department of Transportation (DOT) produced the Traffic Impact Study (TIS) Protocols and Procedures (2008 Protocols) to help standardize the format and methodology used in traffic impact studies associated with new development projects. In November 2014, the 2008 Protocols were revised by the El Dorado County Community Development Agency to the current TIS Guidelines to ensure that the impacts of development projects are addressed consistently with the policies established in the adopted County General Plan. The 2014 update acknowledged that the environmental analysis of a project would require study of all modes of transportation, as opposed to just analyzing motorized vehicles. In addition, the TIS Guidelines include an outline of the expected TIS format, citations from State law and County General Plan policies, and appendices with applicable information.

El Dorado County Code

Title 12 includes regulations related to County streets, sidewalks, and public spaces, including standards for road encroachments to protect members of the public traveling on public roads. In addition, Chapter 12.28 establishes the County's traffic impact fee program, which collects funds for roadway improvements including, but not limited to, new roadways, roadway widenings, intersection improvements, and transit.

El Dorado County Resolution 141-2020

County Resolution 141-2020 was adopted by the County Board of Supervisors in October 2020. The resolution establishes the County VMT thresholds of significance for the purpose of analyzing transportation impacts under CEQA for land use projects. Specifically, Resolution 141-2020 provides that some projects are presumed to result in a less than significant VMT impact absent any evidence to the contrary. The following screening criteria is potentially applicable to the project:

- Projects that generate or attract fewer than 100 trips per day, consistent with OPR's determination of projects that generate or attract fewer than 110 trips per day.

El Dorado County General Plan

Transportation is addressed within the *Transportation and Circulation Element* of the County General Plan. The *Transportation and Circulation Element* contains the following goals, objectives, and policies that apply to the Project (County 2019):

- **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.
 - **Policy TC-1k:** The County shall continue to work with EDCTC, Sacramento Area Council of Governments, Caltrans, TRPA, and other agencies to maintain a current Regional Transportation Plan, to identify funding priorities, and to develop expenditure plans for

available regional transportation funds in accordance with regional, state, and federal transportation planning and programming procedures. Such regional programming may include improvements to state highways, city streets, and County roads.

- **Policy TC-1o:** The County shall work with the cities of Placerville and South Lake Tahoe to establish a system of designated truck routes through urban areas.
- **Policy TC-1q:** The County shall utilize road construction methods that seek to reduce air, water, and noise pollution associated with road and highway development.
- **Policy TC-1x:** To reduce heavy truck traffic in residential areas and near noise sensitive land uses associated with discretionary projects, the County will review truck routes to ensure traffic noise impacts are minimized.
- **Goal TC-X:** To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads.

According to the transportation element of the County General Plan, 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. Level of Service is defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are excepted from these standards and are allowed to operate at LOS F.

- **Policy TC-Xe:** For the purposes of this Transportation and Circulation Element, “worsen” is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:
 - A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or
 - B. The addition of 100 or more daily trips, or
 - C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.
- **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.
 - **Policy TC-3a:** The County shall support all standards and regulations adopted by the El Dorado County Air Quality Management District governing transportation control measures and applicable state and federal standards.
 - **Policy TC-3b:** The County shall consider Transportation Systems Management measures to increase the capacity of the existing road network prior to constructing new traffic lanes. Such measures may include traffic signal synchronization and additional turning lanes.

- **Policy TC-3d:** Signalized intersections shall be synchronized where possible as a means to reduce congestion, conserve energy, and improve air quality.
- **Goal TC-4:** To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of viable alternative transportation modes.
 - **Policy TC-4a:** The County shall implement a system of recreational, commuter, and inter-community bicycle routes in accordance with the County’s Bicycle Transportation Plan. The plan should designate bikeways connecting residential areas to retail, entertainment, and employment centers and near major traffic generators such as recreational areas, parks of regional significance, schools, and other major public facilities, and along recreational routes.
 - **Policy TC-4b:** The County shall construct and maintain bikeways in a manner that minimizes conflicts between bicyclists and motorists.
 - **Policy TC-4c:** The County shall give priority to bikeways that will serve population centers and destinations of greatest demand and to bikeways that close gaps in the existing bikeway system.
 - **Policy TC-4e:** The County shall require that rights-of-way or easements be provided for bikeways or trails designated in adopted master plans, as a condition of land development when necessary to mitigate project impacts.
- **Goal TC-5:** To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.
 - **Policy TC-5c:** Roads adjacent to schools or parks shall have curbs and sidewalks.

City of Placerville Active Transportation Plan

The City of Placerville Active Transportation Plan (Plan) was prepared in February 2020 and establishes a long-term vision for improving walking and bicycling in the City of Placerville. This Plan guides the transportation system in the City of Placerville to serve bicyclists and pedestrians and provides a set of recommended infrastructure improvements and studies paired with education, encouragement, enforcement, and evaluation programs. This Plan also provides a strategy to ensure implementation of these projects and programs is manageable and fundable, recognizing that limited funding and resources will require phased implementation over the planning period (EDCTC 2020c).

City of Placerville City Code

Chapter 15, *Traffic Mitigation Fee*, establishes the City’s traffic impact mitigation fee. This chapter is applicable to new development, and the expansion of existing development within the City that imposes a burden on the existing traffic and circulation infrastructure by adding additional traffic and by creating a need for new traffic and circulation infrastructure.

City of Placerville General Plan

Transportation is addressed within *Section III – Transportation* of the City of Placerville General Plan (City of Placerville 2004). The *Transportation* section contains the following goals and policies that apply to the Project:

- **Goal A:** To provide a circulation system that is correlated and adequate to support existing and proposed land uses, thereby providing for the efficient movement of goods and services within and through the City of Placerville.
 - **Policy 1:** The City of Placerville shall strive to attain the highest possible traffic levels of service consistent with the financial resources available and within the limits of technical feasibility.
 - **Policy 3:** Major circulation improvements should be completed as abutting lands develop or redevelop, with dedication of right-of-way and construction of improvements required as a condition of approval. Where the City of Placerville may deem it appropriate, a property owner can be allowed to enter into a Street Frontage Improvement Agreement in lieu of construction of improvements if the majority of the neighborhood or area is presently unimproved. However, the City of Placerville should require a minimum level of improvements to ensure adequate accessibility for vehicles and emergency equipment.
- **Goal C:** To minimize traffic accidents and hazards.
 - **Policy 1:** The City of Placerville shall discourage the creation or continuance of traffic hazards in new development and other proposals requiring the City to exercise its discretionary authority.
 - **Policy 2:** In the development of new projects, the City of Placerville shall give special attention to maintaining adequate corner-sight distances at city street intersections and at intersections of City streets and private access drives and roadways.
- **Goal E:** To provide a safe and secure bicycle route system.
 - **Policy 2:** Wherever possible, bicycle facilities should be separate from roadways and walkways.
 - **Policy 3:** The City of Placerville shall limit on-street bicycle routes to those streets where the available roadway width and traffic volumes permit safe coexistence of bicycle and motor vehicle traffic.
 - **Policy 5:** The City of Placerville shall promote the development of bicycle routes in major development areas and along railroad rights-of-way.
- **Goal F:** To promote convenient and safe pedestrian circulation.
 - **Policy 4:** Where deemed necessary and appropriate, the City of Placerville shall undertake construction of sidewalks connecting major pedestrian destinations, such as

schools, hospitals, and government centers.

- **Goal H:** To promote the continued maintenance, preservation, and improvement of the Placerville Airport.
 - **Policy 2:** The City of Placerville shall provide for land use surrounding the Placerville Airport that is consistent with the Airport Land Use Compatibility Plan.

City of South Lake Tahoe General Plan

Transportation is addressed within the *Transportation and Circulation Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Transportation and Circulation Element* contains the following goal, policies, and implementation programs that apply to the Project:

- **Goal TC-1:** To develop a transportation network that provides an efficient, comprehensive, and well-maintained roadway system that accommodates vehicular travel while encouraging expanded use of alternative transportation modes.
 - **Policy TC-1.2: Level of Service Standard.** The City of South Lake Tahoe shall establish a minimum LOS Standard “D” for all City streets and intersections. Up to four hours per day of LOS “E” shall be considered acceptable. LOS shall be considered based on average delay for the intersection as a whole for signalized intersections, and for the worst approach for intersections controlled by stop signs or roundabouts. LOS shall be evaluated for a busy, but not peak traffic, day in the peak seasons.
 - **Policy TC-1.4: Capital Improvement Program Funding.** The City of South Lake Tahoe shall provide for sufficient funding to finance the transportation projects in the Capital Improvement Program (CIP).
 - **Policy TC-1.10: Traffic Flow Management.** The City of South Lake Tahoe shall coordinate efforts with Caltrans to manage traffic flows along U.S. 50 and State Route (SR) 89.
 - **Policy TC-1.11: Enhancements along the Highway 50 Corridor.** The City of South Lake Tahoe shall coordinate with Caltrans, El Dorado County, and TRPA to expand multimodal transportation capacity along the U.S. 50 corridor between South Lake Tahoe and Placerville. This may include the provision of rail facilities and services.
 - **Policy TC-1.16: Land Use Strategies to Reduce Travel Demand.** The City of South Lake Tahoe shall reduce travel demand through increased density and mixing of land uses near transit centers and within convenient bicycle and pedestrian travel areas.
- **Goal TC-3:** Expand bicycle and pedestrian activity in community centers and throughout the City of South Lake Tahoe, across all seasons of the year, through enhancements to and maintenance of bike paths, bike lanes, pedestrian paths, and sidewalks.
 - **Policy TC-3.3: Implement the Bicycle Master Plan and Improve Connections.** The City of South Lake Tahoe shall maintain and implement the Bicycle Master Plan and shall improve bicycle and pedestrian connections between all neighborhoods. This shall include linking residential neighborhoods, shopping districts, recreation facilities,

employment centers, schools, and other public facilities with a network of safe, continuous, and attractive pedestrian sidewalks, paths, and bikeways.

- **Policy TC-3.19: New Project Pedestrian and Bicycle Connections.** The City of South Lake Tahoe shall require new projects to provide connections to existing and planned pedestrian and bicycle infrastructure, including ball fields, schools, and riverside pedestrian trails.
- **Implementation Program IMP-4.1: Roadway Maintenance Fee Program.** The City of South Lake Tahoe shall adopt and regularly update a roadway maintenance fee program, as part of the development impact fee schedule, in order to fund long-term roadway improvements and maintenance. [Policy TC-1.4]
- **Implementation Program IMP-4.5: South Lake Tahoe Bicycle Master Plan.** The City of South Lake Tahoe shall update the South Lake Tahoe Bicycle Master Plan. [Policies TC-3.3 and TC-3.19]
- **Implementation Program IMP-4.6: TRPA Bicycle and Pedestrian Master Plan.** The City of South Lake Tahoe shall regularly review and provide feedback on the TRPA Bicycle and Pedestrian Master Plan, and may adopt policies or a revised version of policies from the TRPA plan. [Policies TC-3.3 and TC-3.19]
- **Implementation Program IMP-4.12: Highway Traffic Calming and Sidewalk, Landscape, and Lighting Improvements.** The City of South Lake Tahoe shall pursue Federal funding and assessment district funding to improve the U.S 50 and 89 corridors within the City limits through traffic calming and improved sidewalks, landscaping, and lighting. [Policies TC-1.4 and TC-1.10]
- **Implementation Program IMP-4.15: Sidewalk Mapping.** The City of South Lake Tahoe shall inventory and map all existing sidewalks in the city and prioritize for construction the missing gaps identified in the map and inventory. Priority should be placed on sidewalks that would increase connectivity between residential neighborhoods and shopping, recreation, public services, and employment centers. [Policy TC-3.19]

4.17.1.2 Existing Conditions

Circulation System

El Dorado County's transportation system is primarily focused on the roadway network. The County Road System consists of approximately 1,083 centerline miles of paved roadway. Although automobile travel is the primary function of the roadway network, it also serves a variety of other users including freight haulers, buses, bicycles, pedestrians, and in some locations, equestrians. The roadway network is primarily rural in character but is rapidly urbanizing in the western portion of the County. U.S. 50 is the primary transportation corridor extending through the County from west to east and serves the County's major population centers, including the communities of El Dorado Hills, Cameron Park, Diamond Springs, Camino, and the incorporated cities of Placerville and South Lake Tahoe. Other State highways, County arterials, and a network of local public and private roads constitute the remainder of the roadway system.

State Highways

State highways in El Dorado County include freeways, expressways, and conventional highways that are operated and maintained by Caltrans. These highways are an integral part of the County transportation system serving inter-County and inter-city traffic. El Dorado County has one U.S. route (U.S. 50) and four other State Routes (SRs 49, 89, 153, and 193), all of which are maintained by Caltrans (County 2019).

U.S. Highway 50

U.S. Highway 50, which provides connections to Sacramento County and the State of Nevada, also facilitates access to numerous recreation areas and tourist attractions for visitors from Sacramento and the San Francisco Bay area. U.S. 50 is also the major commute route to employment locations in the greater Sacramento area and the major shipping route for goods movement by truck. From the Sacramento County line to the City of Placerville, U.S. 50 is a four-lane freeway with an eastbound truck-climbing lane on the steep Bass Lake grade and short sections of high occupancy vehicle lanes from the Sacramento County line to El Dorado Hills Boulevard. High occupancy vehicle lanes are restricted to carpools (i.e., vehicles with two or more people), vanpools, and buses during morning and evening peak hours. U.S. 50 transitions to a conventional four-lane highway through the City of Placerville with traffic signals at three major street intersections. East of the City of Placerville and extending into the Lake Tahoe Basin, U.S. 50 is an expressway with unsignalized intersections east to Icehouse Road near Riverton, where the highway narrows to two travel lanes with passing opportunities limited mostly to locations with passing lanes and turnouts (County 2019).

State Route 49

SR 49 serves north-south traffic throughout the Sierra Nevada foothills. SR 49 is a two-lane highway that runs from Plymouth in Amador County, through Diamond Springs, the City of Placerville, Coloma, Pilot Hill, and Cool in El Dorado County, to Auburn in Placer County. The portions of SR 49 between Plymouth and the City of Placerville; the City of Placerville and Coloma; and Cool and Auburn, contain roadway sections that are narrow, winding, and steep with limited passing opportunities (County 2019).

State Route 193

SR 193 runs northerly from SR 49 in the City of Placerville to SR 49 in Cool, passing through Georgetown. The two-lane highway is generally narrower than the Caltrans standard for this type of State highway, except for a wider roadway section near Georgetown and a narrower, steep, and winding roadway section north of the City of Placerville (County 2019).

State Route 89

SR 89 is a north-south route in the northern Sierra Nevada Mountain Range that traverses the Lake Tahoe Basin in El Dorado County. The segment of SR 89 within the County is a two-lane road, which provides access to the South Shore via the west shore of Lake Tahoe and from the southeast via Luther Pass. The highway diverges with U.S. 50 at the intersection known as the South Tahoe Y, a major activity center in the City of South Lake Tahoe. The road provides access to major recreational opportunities, particularly Fallen Leaf Lake, Camp Richardson, and Emerald Bay (City of South Lake Tahoe 2010).

State Route 153

State Route 153 is a one-half mile long, narrow, two-lane road that extends from the junction of Cold Springs Road and SR 49 to the Marshall Monument in Coloma and does not handle regional traffic.

Aviation System

There are four general aviation airports within the County. The Placerville Airport and the Georgetown Airport are both owned and operated by El Dorado County. Cameron Airpark Airport is owned and operated by the Cameron Park Airport District, a special district, and the Lake Tahoe Airport is owned and operated by the City of South Lake Tahoe.

The County's airports are used by the general public as well as military and other government agencies for training flights, search and rescue missions, and fire suppression support. Placerville Airport averages 178 operations per day, 98 percent of which are general (public use) aviation operations. Georgetown Airport averages 62 operations per day; 98 percent of these operations are also general aviation. Cameron Airpark averages 99 operations per day. All of these operations are general aviation as this airport does not have military operations. Lake Tahoe Airport averages 67 operations per day, 98 percent of which are general aviation operations (County 2019).

Non-Motorized Transportation System

The non-motorized transportation system is composed of local and regional bikeways and trails in El Dorado County. With the exception of students commuting to school, bicycles and other forms of non-motorized transportation have not been widely used as a mode of transportation for commuting in the County. Most bicycling and walking in the County occur for recreational or social purposes (County 2019).

Bicycle Network

The bicycle network in the County is made up of three classes of bicycle facilities, as classified by Caltrans (County 2019; City of South Lake Tahoe 2010):

- **Class I Bikeway (Bicycle Trail):** A Class I bikeway is a facility that is physically separated from a roadway and designated primarily for the use of bicycles. Cross flows by pedestrians and motorists are to be minimized. Bicycle trails typically serve corridors not served by streets and highways, or where sufficient right-of-way exists to construct a separate facility parallel to the roadway. Bicycle trails can provide both recreational and commuter opportunities.
- **Class II Bikeway (Bicycle Lane):** A Class II bikeway is a facility featuring a striped lane on the paved area of a road for preferential use by bicycles. It is located along the edge of the paved area outside the motor vehicle travel lanes. Where sufficient pavement width exists, it may be located between a parking lane and the outside motor vehicle travel lane. A bicycle lane serves to differentiate the right-of-way assigned to bicyclists and motorists, and provides for more predictable movements by each. A bicycle lane is typically identified by black and white "Bike Lane" signs, special lane striping, and may have "Bike Lane" stencils on the pavement. Bicycle lanes are one-way facilities in the same direction as adjacent motor vehicle flow.

- **Class III Bikeway (Bicycle Route):** A Class III bikeway route is a facility typically identified by green and white “Bike Route” guide signing only. There are usually no special lane designations, and parking may be permitted. Bicycle routes are established as a means to connect otherwise discontinuous segments of Class I or Class II bikeways.

Pedestrian Network

The sidewalk system throughout the County is limited. Due to the lack of sidewalks and pedestrian pathways, walking can be hazardous since pedestrians in many areas are forced to walk along the roadway shoulder or on other undesignated areas adjacent to the roadway. These conditions worsen during the winter months when snow buildup and berms often block the roadway shoulders or when ice or snow is present.

The western slope of the County has a blend of urban, rural, and suburban pedestrian circulation characteristics. For example, the El Dorado Hills area in the west edge of El Dorado County hosts several suburban neighborhoods developed with existing sidewalks, while the Latrobe and Shingle Springs communities in southwest El Dorado County are very rural, characterized by ranches typically flanked by rural two-lane roads with little or no shoulder. The areas of Pollock Pines and Camino to the east are also rural, with limited number of sidewalks. The City of Placerville in the center of the County is a historic gold rush town in which many sidewalks are antiquated or considered non-standard (EDCTC 2008).

In the City of South Lake Tahoe, existing sidewalks can be found along portions of U.S. 50 from the intersection of U.S. 50 and SR 89, called the “Y”, to Stateline, as well as on various streets throughout the city. The sidewalks along U.S. 50 are intermittent, with sections of no pavement or deteriorated conditions. The City of South Lake Tahoe constructs and maintains shared-use facilities such as Class I facilities, which contribute to the pedestrian network available within the city limits (City of South Lake Tahoe 2010).

Public Transportation

Public transportation in El Dorado County consists of the following services and facilities:

- El Dorado County Transit Authority (EDCTA)
- Lake Tahoe Transit
- Commercial bus services
- Taxi service
- Vanpools and carpools
- Park-and-ride facilities (County 2019)

EDCTA and Lake Tahoe Transit provide transit services in El Dorado County. EDCTA serves the residents of western El Dorado County, providing scheduled fixed-route service, daily commute service to Sacramento, dial-a-ride service in the City of Placerville and outlying communities, and chartered social service routes. Life-line service is also provided to the elderly, the disabled, and Sacramento commuters. For EDCTA’s fixed-route service, seven routes are local (within El Dorado County), and 12 are commuter

routes to Sacramento County. The commuter service was particularly well used with an average weekday ridership of approximately 500 rides (County 2019).

Lake Tahoe Transit provides service throughout the Tahoe Basin. Areas of El Dorado County are served by the “Nifty Fifty Trolley,” which is geared toward tourism, and the South Tahoe Area Ground Express. Lake Tahoe Transit also provides connections for travel from the south shore to Tahoe’s north shore and the town of Truckee in Placer County. Lake Tahoe Transit also provides demand response service in El Dorado County through its Bus Plus program (County 2019).

Amtrak provides its Thruway Service (bus service) to customers in Placerville and South Lake Tahoe. To use this service, customers make reservations with Amtrak to provide bus service to an Amtrak Station. Currently, Lightning Taxi and All Dorado Taxi provide service in western El Dorado County and are available on demand or by reservation. Seven different companies currently provide taxi service in the Tahoe Basin. Formal carpools and vanpools in the County are organized by the State of California and VPSI. Six state vanpools are available to transport state employees residing in El Dorado Hills, Shingle Springs, Placerville, Pollock Pines, and Rescue to their jobs in Sacramento. Five of these vanpools travel to downtown Sacramento while one travels to the Franchise Tax Board in Rancho Cordova. Park-and-ride lots provide a place for commuters to park their cars so they can transfer to public transit or carpools. El Dorado County has 14 park-and-ride facilities with 12 facilities concentrated along U.S. 50. These parking sites are important in encouraging ride sharing by providing a place to leave a personal vehicle in order to use public transportation or another form of ridesharing (County 2019).

4.17.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant transportation impact if the Project would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,
4. Result in inadequate emergency access.

4.17.3 Impact Analysis

TRA-1 The proposed project may conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Construction

Construction activities may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services. Coordination with local agencies (e.g., California Highway Patrol, Caltrans, and local law enforcement and fire departments) for any necessary and temporary road closures would be required, especially for construction within designated emergency

access routes or in areas that would impede or otherwise affect evacuation and emergency access or services.

To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1 below. Depending on the location of individual fiber projects, an Encroachment Permit application would be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3 for review and approval. Any construction on Bureau of Land Management (BLM) land would require the ROW acquisition, and any construction on U.S. Forest Service (USFS) land would require a construction easement. Any construction on private land would require applicable building permits. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required for all construction activities along ROW, and would be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits. With implementation of Mitigation Measure TRA-1, which requires preparation of a Traffic Control and Detour Plan, potentially significant traffic impacts from construction of individual fiber projects along ROW would be reduced to less than significant.

Staging areas are planned to be established in typical roadway cross-sections. If road constraints prevent locating staging areas along roadways, alternative areas such as previously disturbed private or public land would be used. The exact locations of staging areas and equipment lay-down areas would be determined during the final construction plans for each individual fiber project. Construction companies awarded contracts for specific segments would select the staging area locations.

Operation

The operation of individual fiber projects would not conflict with any program, plan, ordinance, or policy concerning traffic circulation systems. Operational activities for any individual fiber projects implemented under the Project would be limited to routine maintenance and emergencies. Infrastructure such as circuit cabinets with cooling fans and/or stand-by generators associated with individual fiber projects may be routinely checked, as needed.

Impact Conclusion

With Implementation of Mitigation Measure TRA-1, which requires preparation of a Traffic Control and Detour Plan, construction impacts would be less than significant. Operation of the proposed Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure TRA-1: Traffic Control and Detour Plan

Prior to the issuance of an encroachment permit, a Traffic Control and Detour Plan shall be developed for individual fiber projects that would require an encroachment permit for construction activities along ROW to manage traffic during construction. The applicant shall consult with the Lead Agency and/or Caltrans prior to initiation of construction activities that may affect area traffic (such as construction staging necessitating lane closure, trenching, etc.) to ensure that the Traffic Control and Detour Plan is

prepared in conformance with applicable code and ordinance requirements for emergency access. The construction contractor shall implement appropriate traffic controls identified in the Traffic Control and Detour Plan in accordance with the California Vehicle Code and other State and local requirements to avoid or minimize impacts on traffic during construction. The Traffic Control and Detour Plan shall be submitted to the agency responsible for issuing the encroachment permit for review and approval prior to the commencement of construction activities.

Significance with Mitigation: Less than significant impact.

TRA-2 The proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changed the way transportation impact analysis is conducted as part of CEQA compliance. These changes include elimination of automobile delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts under CEQA. According to SB 743, these changes are intended to “more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.”

In December 2018, the OPR completed an update to the CEQA Guidelines to implement the requirements of SB 743. The Guidelines state that VMT must be the metric used to determine significant transportation impacts. The Guidelines require all lead agencies in California to use VMT-based thresholds of significance in CEQA documents published after July 2020. The OPR Guidelines recommend that local jurisdictions develop screening criteria to help identify development projects that will not cause a significant impact on VMT. The OPR Guidelines also recommend evaluating VMT impacts using an efficiency-based version of the metric, such as VMT per resident for residential developments and/or VMT per worker for office or other employment-based developments.

The unincorporated areas of the County and the City of Placerville are subject to El Dorado County’s VMT thresholds. According to County General Plan Policy TC-Xe, a project would worsen level of service conditions if a project would result in A) two percent increase in traffic during a.m., p.m. peak hour, or daily, B) the addition of 100 or more daily trips, or C) the addition of 10 or more trips during the a.m. or p.m. peak hour. On October 6, 2020, the County Board of Supervisors adopted Resolution 141-2020, which established the County VMT thresholds of significance for the purpose of analyzing transportation impacts under CEQA for land use projects. To be consistent with the County’s General Plan Policy TC-Xe, Resolution 141-2020 concluded that projects that generate or attract fewer than 100 trips per day would result in a less than significant impact on VMT.

Additionally, the *2018 OPR Technical Advisory on Evaluating Transportation Impacts in CEQA* screening guidelines recommend that projects attracting fewer than 110 trips per day should be assumed to cause a less than significant impact on VMT.

The eastern portion of the County located within the Lake Tahoe Basin, which includes the City of South Lake Tahoe, is subject to TRPA VMT thresholds. According to the TRPA Code of Ordinances Subparagraph 65.2.3.D, a project would result in a less than significant impact on VMT if it meets the following screening criteria:

- Projects Generating Low VMT: Projects will be screened from further transportation analysis using the following vehicle miles traveled calculations:
 - 1,300 in-Basin VMT within town centers and the half-mile buffer around them.
 - 715 in-Basin VMT in all other areas.

The proposed Project would include construction and operation of broadband infrastructure. Construction of individual fiber projects under the proposed Project would be temporary and intermittent in nature and therefore would not result in a long-term increase in vehicular trips. Operational activities for any individual fiber projects implemented under the Project would be limited to routine maintenance and emergencies. Infrastructure such as circuit cabinets with cooling fans and/or stand-by generators associated with individual fiber projects may be routinely checked, as needed. Operation of individual fiber projects would result in fewer than 100 trips per day, and correspondingly, a traffic impact study is not necessary under the County's *Traffic Impact Study Guidelines*. Additionally, as the project would install broadband infrastructure, the Project would meet the TRPA VMT screening criteria listed above. Operation and maintenance of individual fiber projects would generate minimal worker vehicle trips and would not lead to a substantial increase in VMT per capita within the County. Therefore, the impact on VMT would be less than significant.

Significance without Mitigation: Less than significant impact.

TRA-3 The proposed project may substantially increase hazards due to incompatible uses (e.g., temporary lane closures) during Project construction.

Implementation of the Project would involve installation of fiber optic lines either underground in buried conduits, overhead on existing or newly constructed utility poles, or in a combination of both. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements.

Potential road hazards can occur due to a design feature or physical configuration of existing or proposed access roads that can affect the safe movement of vehicles along a roadway. Future development of the proposed Project would not alter the permanent configuration of roadways within the County and would not introduce types of vehicles that do not already travel on these roads. As noted under Impact TRA-1, construction activities may require temporary lane closures. Coordination with local agencies (e.g., California Highway Patrol, Caltrans, and local law enforcement and fire departments) for any necessary and temporary road closures would be required. To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as outlined in Mitigation Measure TRA-1. Depending on the location of individual fiber projects, an Encroachment Permit application would be submitted to the applicable local, State, or federal agency for review and approval.

Once construction activities have ceased, any roads impacted by construction would return to pre-construction conditions. With implementation of TRA-1, which requires preparation of a Traffic Control

and Detour Plan, the proposed Project would not introduce or increase hazards due to a geometric design feature or incompatible uses, and impacts would be less than significant.

Significance without Mitigation: Potentially significant impact.

See Impact TRA-1 for Mitigation Measure TRA-1.

Significance with Mitigation: Less than significant impact.

TRA-4 The proposed project may result in inadequate emergency access during Project construction.

Construction

Construction of individual fiber projects may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services. Coordination with local agencies (e.g., CHP, Caltrans, and local police and fire departments) for any necessary and temporary road closures would be required, especially for construction along ROW, within designated emergency access routes, or in areas that would impede or otherwise affect evacuation and emergency access or services. To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1. Depending on the location of individual fiber projects, an Encroachment Permit application would be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3 for review and approval. Any construction on Bureau of Land Management (BLM) land would require the ROW acquisition, and any construction U.S. Forest Service (USFS) land would require a construction easement. Any construction on private land would require applicable building permits. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required for all construction activities along ROW, subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits. With implementation of TRA-1, which requires preparation of a Traffic Control and Detour Plan, potential impacts during construction would be less than significant.

Operation

Operational activities for any individual fiber projects implemented under the Project would be limited to routine maintenance and emergencies. Infrastructure such as circuit cabinets with cooling fans and/or stand-by generators associated with individual fiber projects may be routinely checked, as needed.

Impact Conclusion

To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1. With implementation of TRA-1, potential impacts during construction would be less than significant.

Implementation of the proposed Project would introduce a wider and more reliable network that would benefit communications to emergency services. The Project would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. The Project may also increase individuals' access to telehealth throughout the County, which could reduce the need for medical emergency response vehicles and demand for emergency response services. Therefore, the Project would not result in inadequate emergency access, and the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

See Impact TRA-1 for Mitigation Measure TRA-1.

Significance with Mitigation: Less than significant impact.

4.17.4 Cumulative Impacts

TRA-5 The proposed project may contribute to a significant cumulative impact with respect to transportation.

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in El Dorado County, would directly or indirectly have a substantial adverse effect on transportation, VMT, and circulation. As discussed above under Impact TRA-1 through TRA-4, implementation of the proposed Project would result in a less than significant impact related to transportation with implementation of Mitigation Measure TRA-1.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other cumulative projects in the County. As shown in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis, numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. The vast majority of these cumulative transportation projects involve existing transportation infrastructure, as such, construction activities may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services.

To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required to be employed for all construction activities along ROW, and would be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits.

Individual fiber projects would not involve operational trips other than occasional routine maintenance of the fiber optic cables. Operation of the proposed Project would introduce a wider and more reliable network that would benefit communications to emergency services. The Project would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. Therefore, the impact would be less than cumulatively considerable.

Significance without Mitigation: Potentially significant impact.

See Impact TRA-1 for Mitigation Measure TRA-1.

Significance with Mitigation: Less than significant impact.

4.17.5 References

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4.18 TRIBAL CULTURAL RESOURCES

This section describes the regulatory framework and existing conditions related to tribal cultural resources and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on tribal cultural resources were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance.

On August 30, 2024, the Native American Heritage Commission (NAHC) sent a letter to El Dorado County (County) to provide comments on the Program Environmental Impact Report (EIR). The NAHC requested that consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project be conducted as early as possible to avoid inadvertent discoveries. The NAHC also requested that the proposed Project comply with Assembly Bill (AB) 52 and Senate Bill (SB) 18, as appropriate. The Notice of Preparation (NOP) public comments letters are included in Appendix C.

4.18.1 Environmental Setting

4.18.1.1 Tribal Cultural Resources Overview

Pursuant to California Public Resources Code (PRC) Section 21074, tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR), or included in a local register of historical resources as defined in Subdivision (k) of PRC Section 5020.1.

Tribal cultural resources include pre- and post-contact Native American resources. Precontact resources represent the remains of human occupation prior to European settlement. Historic, or post-contact, resources represent remains after Europeans settlement and may be part of a “build environment,” including human-made structures used for habitation, work, recreation, education, and religious worship. Native American resources include ethnographic elementals pertaining to Native American issues and values.

4.18.1.2 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for tribal cultural resources. These policies provide context for the impact discussion related to the proposed Project’s consistency with the applicable regulatory conditions.

Federal Regulations

National Historic Preservation Act (54 United States Code 300101 et seq.)

The National Historic Preservation Act (NHPA) establishes the federal government policy on historic preservation and the programs, including the National Register of Historic Places (NRHP), through which this policy is implemented. Under the NHPA, significant cultural resources, referred to as historic properties, include any prehistoric or historic district, site, building, structure, object, or landscape included in, or determined eligible for inclusion in, the NRHP. Historic properties also include resources

determined to be a National Historic Landmark. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting United States heritage. A property is considered historically significant if it meets one or more of the NRHP criteria and retains sufficient historic integrity to convey its significance. This act also established the Advisory Council on Historic Preservation (ACHP), an independent agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policies. The ACHP also provides guidance on implementing Section 106 of the NHPA by developing procedures to protect cultural resources included in, or eligible for inclusion in, the NRHP. Regulations are published in 36 Code of Federal Regulations (CFR) Parts 60, 63, 800.

Section 106 of the NHPA (codified as 36 CFR Part 800) requires that effects on historic properties be taken into consideration in any federal undertaking. The process generally has five steps: (1) initiating Section 106 of the NHPA process, (2) identifying historic properties, (3) assessing adverse effects, (4) resolving adverse effects, and (5) implementing stipulations in an agreement document.

Section 106 of the NHPA affords the ACHP and the State Historic Preservation Officer (SHPO), as well as other consulting parties, a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. State Historic Preservation Officers administer the national historic preservation program at the state level, review NRHP nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with federal agencies during Section 106 review.

The NRHP eligibility criteria (36 CFR Section 60.4) is used to evaluate significance of potential historic properties. Properties meeting any of the following criteria are considered eligible for listing in the NRHP if they retain integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

- a. Associated with events that have made a significant contribution to the broad patterns of our history.
- b. Associated with the lives of persons significant to our past.
- c. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master; or that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction.
- d. Have yielded, or may be likely to yield, information important in prehistory or history.

Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for NRHP inclusion. In addition, a broader range of Traditional Cultural Properties are also considered and may be determined eligible for or listed in the NRHP. Traditional Cultural Properties are places associated with the cultural practices or beliefs of a living community that are rooted in that community's history and that may be eligible because of their association with cultural practices or beliefs of living communities that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. In the NRHP programs, "culture" is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the nation as a whole.

California State Office of Historic Preservation

The California State Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration and protection of California's irreplaceable archaeological and historical resources under the direction of the SHPO, a gubernatorial appointee, and the State Historical Resources Commission.

OHP's responsibilities include:

- Identifying, evaluating, and registering historic properties;
- Ensuring compliance with federal and state regulatory obligations;
- Encouraging the adoption of economic incentives programs designed to benefit property owners; and
- Encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation in California.

State Regulations

California Environmental Quality Act of 1970

CEQA Guidelines establishes a process for the issuing of discretionary permits by all California public agencies. The process includes full public disclosure and analysis of a project's potential effects on the human environment, open public comment period(s), and written responses by agencies to public comments. CEQA also requires agencies to consider project alternatives that reduce environmental impacts, and to ensure that environmental impacts are fully mitigated if mitigation is practicable. The human environment considered under CEQA includes agriculture, air quality, biological resources, geology and soils, greenhouse gases, hazards, historical and archaeological resources, land use and planning policies, mineral resources, noise, paleontological resources, population growth and housing, public services, recreation, traffic, tribal cultural resources, water quality, utilities, and visual resources.

Historical and archaeological resources are afforded consideration and protection by CEQA [14 California Code of Regulations (CCR) Section 21083.2, 14 CCR Section 15064]. The CEQA Guidelines define significant cultural resources under two regulatory designations: historical resources and unique archaeological resources. An historical resource is defined as a "resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR"; or "a resource listed in a local register of historical resources or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the [PRC]"; or "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the agency's determination is supported by substantial evidence in light of the whole record" (14 CCR Section 15064.5[a][3]). Historical resources that are automatically listed in the CRHR include California historical resources listed in or formally determined eligible for the NRHP and California Registered Historical Landmarks from No. 770 onward (PRC 5024.1[d]). Locally listed resources are entitled to a presumption of significance unless a preponderance of evidence in the record indicates otherwise.

Under CEQA, a resource is generally considered historically significant if it meets the criteria for listing in the CRHR. A resource must meet at least one of the following four criteria (PRC 5024.1; 14 CCR Section 15064.5[a][3]):

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. Title 14, CCR Section 4852(b)(1) adds "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."
- Is associated with the lives of persons important in our past. Title 14, CCR Section 4852(b)(2) adds, "is associated with the lives of persons important to local, California, or national history."
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values. Title 14, CCR 4852(b)(3) allows a resource to be CRHR eligible if it represents the work of a master.
- Has yielded, or may be likely to yield, information important in prehistory or history. Title 14, CCR 4852(b)(4) specifies that importance in prehistory or history can be defined at the scale of "the local area, California, or the nation."

Historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association (14 CCR 4852[c]).

An archaeological artifact, object, or site can meet CEQA's definition of a unique archaeological resource, even if it does not qualify as a historical resource (14 CCR 15064.5[c][3]). An archaeological artifact, object, or site is considered a unique archaeological resource if "it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC 21083.2[g]):

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person."

Within California state law, cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. All resources nominated for listing in the CRHR must have integrity; the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Therefore, resources must retain enough of their historical character or appearance to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and/or association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination (Calif. PRC Section 5024.1).

CEQA Guidelines, California Code of Regulations Title 14, Section 15064.5

When an initial study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC. A project proponent may develop an agreement for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American burials with the appropriate Native Americans identified as the most likely descendant by the NAHC.

Assembly Bill 52

AB 52 adds consultation with Native American tribes to the approval process for all projects requiring discretionary permits and subject to CEQA (see below). Tribes inform local agencies that they wish to be informed of proposed actions, and agencies are required to consult with those tribes before taking actions that may affect tribal cultural resources.

California Senate Bill 18 (California Government Code, Section 65352.3)

Pursuant to SB 18, local governments are required to consult with California Native American tribes identified by the NAHC for the purpose of protecting and/or mitigating impacts to cultural places. Senate Bill 18 requires formal consultation with Native American tribes as part of a project that enacts or amends a general plan or a specific plan.

California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify NAHC within 24 hours of this identification.

Public Resources Code Section 5024 et seq.

PRC Section 5024 requires that each state agency develop policies for the preservation and maintenance of all state-owned historical resources under its jurisdiction listed in, or potentially eligible for, inclusion in the NRHP, or registered or eligible for registration as a state historical landmark. Each State agency is required to submit updates to their inventory of all state-owned structures over 50 years of age under its jurisdiction listed in or which may be eligible for inclusion in the NRHP or registered or which may be eligible for registration as a state historical landmark. These inventories are used to create a master list maintained by the OHP. The SHPO must be consulted by state agencies if any action would alter or affect any resources on this master list (PRC Section 5024(f)). Additionally, Section 5024.1 establishes the CRHR as an authoritative guide for identifying which cultural resources are to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR eligibility criteria provide one of the bases for determining a cultural resource to be significant under CEQA.

Public Resources Code Section 5097.9 et seq.

PRC Section 5097.9 establishes that both public agencies and private entities using, occupying, or operating on state property under public permit, shall not interfere with the free expression or exercise

of Native American religion and shall not cause severe or irreparable damage to Native American sacred sites, except under special, determined circumstances of public interest and necessity. This section also creates the Governor-appointed nine-member NAHC, charged with identifying and cataloging places of special religious or social significance to Native Americans, identifying and cataloging known graves and cemeteries on private lands, and performing other duties regarding the preservation and accessibility of sacred sites and burials and the disposition of Native American human remains and burial items.

Under PRC Section 5097.5, all state and local agencies must cooperate with the NAHC by providing copies of appropriate sections of all CEQA environmental impact reports relating to property of special significance to Native Americans. The NAHC is required to investigate the effect of proposed actions by a public agency if these actions may either cause severe or irreparable damage to a Native American sacred site located on state property or inhibit access to that site.

The NAHC is authorized to recommend mitigation measures if it finds, after a public hearing, that a proposed action would result in that damage or interference and to request action from the Attorney General if these mitigation measures are not addressed. This section also includes requirements for landowners to limit further development activity on property where Native American human remains are found until that landowner confers with NAHC-identified most likely descendants to consider treatment options. It further enables those descendants, within 48 hours of notification by the NAHC, to inspect the discovery site and recommend to the landowner or the person responsible for the excavation the means to treat or dispose of the human remains and any associated grave goods with dignity. In the absence of a most likely descendant, or of a treatment acceptable to all parties, the landowner is required to reinter the remains elsewhere on the property in a location that will not be disturbed. Finally, this section makes it a felony to remove Native American artifacts or human remains from a Native American grave or cairn, as well as to acquire, possess, sell, or dissect Native American remains, funerary objects, or artifacts from a Native American grave or cairn and establishes the repatriation of these remains, funerary objects, and associated grave artifacts as state policy (PRC Section 5097.9, *et seq.*).

California Health and Safety Code Section 8010-8011: California Native American Graves Protection and Repatriation Act (2001)

This section establishes a state policy that is partially consistent with the federal Native American Graves Protection and Repatriation Act (NAGPRA). It attempts to ensure that all Native American human remains, and cultural items are treated with dignity and respect. It encourages the voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California and requires that the State provide tribes with the mechanisms necessary to file and follow up with repatriation claims (California Health and Safety Code Section 8010 8011, *et seq.*).

California Government Code Sections 65560 and 65562.5: Consultation with Native Americans on Open Space (2005)

This section identifies the protection of Native American cultural places as acceptable designations of open space. It further requires local governments to conduct meaningful consultation with California Native American tribes on the contact lists maintained by the NAHC for purposes of protecting cultural places located on open space (California Government Code Section 65560, 65562.5, *et seq.*).

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 33, *Grading and Construction*, applies to grading, excavation, filling, clearing of vegetation, or disturbance of the soil, and protection of vegetation during construction. Section 33.3.7 stipulates that whenever historic, prehistoric, or paleontological materials appearing to be 50 years or older are discovered during grading activity and have not been accounted for previously pursuant to Section 67.3, below, grading shall cease, and TRPA shall be notified immediately. TRPA shall suspend grading and consult with the appropriate local, State, or federal entities and determine whether the site should be nominated as a historical resource.

Chapter 67, *Historic Resource Protection*, provides for the identification, recognition, protection, and preservation of the Region's significant cultural, historic, archaeological, and paleontological resources. Section 67.3, Resource Protection, establishes measures for the inadvertent discovery and protection of historic or cultural artifacts during construction and ground disturbing activities.

The Shorezone Subelement, Conservation Element of the Goals and Policies identifies special qualities, including physical, biological and visual, that shall be considered when reviewing a project in the shorezone or lakezone. In accordance with those policies, Chapter 80, *Review of Projects in the Shorezone and Lakezone*, sets forth findings that must be made by TRPA prior to approving a project in the shorezone or lakezone. All projects and activities in lagoons or the shorezone or lakezone of any lake in the Region shall comply with the provisions of this chapter. Section 80.4.6 establishes measures to protect historical and/or cultural resources in the shorezone and lakezone in the Region.

TRPA Regional Plan

Cultural resources are addressed within the Cultural sub-element of the *Conservation Element* of the TRPA Regional Plan (TRPA 2024b). The Cultural sub-element contains the following goal and policy that applies to the Project:

- **Goal C-1:** Identify and preserve sites of historical, cultural, and architectural significance within the Region. The Tahoe Region has a heritage that should be recognized and appropriately protected. Due to the harsh weather conditions, changing development standards, and changing

uses of the Region, many structures that had significant historical or architectural value have been destroyed or lost.

- **Policy C-1.1:** Historical or culturally significant landmarks in the Region shall be identified and protected from indiscriminate damage or alteration. TRPA will confer with local, state and federal agencies to maintain a list of significant historical, architectural, and archaeological sites within the Region that have been identified by applicable agencies. Special review criteria will be established to protect such designated sites in cooperation with property owners.

Local Regulations

El Dorado County General Plan

Cultural resources are addressed within the *Conservation and Open Space Element* of the County General Plan. The *Conservation and Open Space Element* contains the following goal, objectives, policies, and implementation measures that apply to the Project (County 2017):

- **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 7.5.1.3:** 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 7.5.1.6:** 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 7.5.2.4:** The County shall prohibit the modification of all National Register of Historic Places/California Register of Historical Resources 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.
- **Implementation Measure CO-Q:** Develop and adopt a Cultural Resources Preservation Ordinance.

City of Placerville General Plan

Cultural resources are addressed within *Section V – Natural, Cultural, and Scenic Resources* of the City of Placerville General Plan (City of Placerville 2004). The *Natural, Cultural, and Scenic Resources* section contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal G:** To preserve and enhance the City of Placerville’s historical heritage.
 - **Policy 1:** The City of Placerville shall set as a high priority the protection and enhancement of Placerville’s historically and architecturally significant buildings and sites.
 - **Policy 3:** The City of Placerville shall prepare, maintain, and regularly update an inventory of buildings, sites, cemeteries, parks, and other artifacts of historical and architectural significance.
 - **Policy 5:** The City of Placerville shall work with property owners in seeking registration of historical structures as State Historic Landmarks and/or listing on the National Register of Historic Places.
 - **Policy 6:** The City of Placerville shall support the efforts of property owners to preserve and renovate historic and architecturally significant structures. Where buildings cannot be preserved intact, the City shall seek to preserve the building facades.
 - **Policy 10:** The City of Placerville shall work closely in promoting and protecting Placerville’s historic heritage with historical and heritage organizations, including those along the Highway 49 “Gold Chain.”

- **Goal H:** To protect Placerville’s Native American heritage.
 - **Policy 1:** The City of Placerville shall not knowingly approve any public or private project that may adversely affect an archeological site without consulting the California Archeological Inventory at California State University, Sacramento, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendations of a qualified archeologist. City implementation of this policy shall be guided by Appendix K of the State CEQA Guidelines.
 - **Policy 2:** The City of Placerville shall refer development proposals that may adversely affect archeological sites to the California Archeological Inventory at California State University, Sacramento.
 - **Policy 3:** The City of Placerville shall work closely in promoting and protecting Placerville’s Native American heritage with historical and archeological organizations, including those along Highway 49 “Gold Chain.”
- **Implementation Program 8:** The City of Placerville shall conduct a survey of historic and architecturally significant buildings, structures, and sites in the immediate Placerville area. The resulting inventory shall be regularly updated.
- **Implementation Program 10:** The City of Placerville shall establish an agreement with the California Archeological Inventory at California State University, Sacramento, for review of development proposals that may adversely impact archeological sites.

City of South Lake Tahoe General Plan

Cultural resources are addressed within the *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Natural and Cultural Resources Element* contains the following goal, policies, and implementation program that apply to the Project:

- **Goal NCR-4:** To preserve and maintain sites and structures that serve as significant, visible connections to the City of South Lake Tahoe’s social, cultural, and architectural history.
 - **Policy NCR-4.1: Significant Site Preservation.** The City of South Lake Tahoe shall preserve sites of historical, cultural and architectural significance within the City, consistent with the Secretary of the Interior Standards for Treatment of Historic Properties.
 - **Policy NCR-4.2: Historic Landmark Designation.** The City of South Lake Tahoe shall designate structures or sites having special character or special historic, architectural, or aesthetic interest or value as local historic landmarks. The City shall protect local historic landmarks from demolition and inappropriate alterations and develop criteria for evaluating the appropriateness for sites or structures to be designated as local historic landmarks and provide incentives for preservation of local historic landmarks.
 - **Policy NCR-4.3: Archeological Investigations.** The City of South Lake Tahoe shall require archeological investigations for all applicable discretionary projects, in accordance with CEQA regulations, for areas not previously surveyed and/or that are determined

sensitive for cultural resources (e.g., undeveloped parcels near water features). The City of South Lake Tahoe shall require the preservation of discovered archeologically-significant resources (as determined based on TRPA, State, and Federal standards by a qualified professional) in place if feasible, or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures) prior to further disturbance.

- **Policy NCR-4.4: Paleontological Resource Evaluation.** The City of South Lake Tahoe shall require that a paleontological resources evaluation be prepared and measures to mitigate impacts to paleontological resources be identified (avoidance, preservation in place, excavation, documentation, and/or data recovery) when fossils are discovered during ground-disturbing activities.
- **Policy NCR-4.5: Human Remains Discovery.** The City of South Lake Tahoe shall require/condition projects and other ground disturbance activities to notify the City if human remains are discovered and halt work. The County Coroner will be notified according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.
- **Implementation Program IMP-8.5: Historic Landmark Designation.** The City of South Lake Tahoe shall create a historic landmark program to designate structures or sites having special character or special historic, architectural, or aesthetic interest or value as local historic landmarks. The program should protect local historic landmarks from demolition and inappropriate alterations, including criteria for evaluating the appropriateness for sites or structures to be designated as local historic landmarks, and incentives for preservation of local historic landmarks.

4.18.1.3 Tribal Cultural Resources Setting

Ethnographic Setting

At the time of contact three main groups of Native Americans inhabited El Dorado County. The Nisenan (or “Southern Maidu”) occupied the northern portion of the County in an area stretching from Folsom Reservoir to the crest of the Sierra Nevada mountains just west of Lake Tahoe, and up to several miles south of present-day U.S. Highway 50 (U.S. 50). Sierra Miwok peoples lived in a region generally south of U.S. 50, extending from the Latrobe area in the west to the vicinity of Strawberry in the east. The higher elevation areas to the west and south of Lake Tahoe were occupied by the Washoe.

Nisenan

At the time of European contact, much of the Project vicinity was occupied by the Nisenan (alternatively known as the Southern Maidu). Maiduan groups are identified primarily by their language, which is a subgroup of the California Penutian linguistic family; these groups are divided, mainly on dialectic grounds, into the Nisenan, or Southern Maidu (living within the American River drainage plus parts of the Bear, Cosumnes, and Yuba rivers), the Northeastern Maidu (on the upper reaches of the North and Middle Forks of Feather River), and the Northwestern Maidu (below the foothills of the Sierra Nevada where the south, middle, north, and west branches of Feather River converge and on upper Butte and

Chico creeks as well as parts of the Sacramento Valley). Nisenan villages ranged in population from 15 to 25 people, with the tribal centers averaging more than 500 people. Large settlements consisted of one major village with associated smaller, seasonal camps. Villages were typically located on ridges above major streams and rivers and were inhabited mainly in the winter months. During the hot summer months, the Nisenan moved to cooler temporary camps in higher elevations.

The local environment provided abundant food sources with seasonal gathering conducted mainly by women and children. Hunting and fishing, primarily conducted by the men, were year-round pursuits but were most successful in the late summer and early fall. The Nisenan had few contacts outside their immediate tribal territory and those contacts were limited to warfare, trade, and ceremonial gatherings. Villages were led by a headman or advisor, but each extended family had a leader who assisted the village headman. Some of the headman's duties included advising the people in general, preventing them from trespassing, directing ceremonies and festivities, arbitrating disputes, and leading the village in times of warfare. Typically, the dead were cremated along with their property, and their dwelling was either moved or destroyed.

Maidu groups practiced a religion called the "Kuksu," which was widespread among California Native Americans and appeared in various forms. Ceremonies were typically conducted in the semi-subterranean dance houses that were centrally located within each village. A ceremony celebrated annually in the fall was the mourning ceremony that honored ancient ancestors as well as the individuals that had died during the year.

Early contact with the Spanish was limited to the southern edge of Nisenan territory, with most early accounts resulting from early penetrations of Spanish into Plains Miwok territory. During the late 18th century, systematic removal to the missions and resistance by the Plains Miwok occurred along the border shared with the Nisenan. The Nisenan also received missionized Native Americans into their territory, as well as Miwok villagers displaced by the Spanish (Wilson and Towne 1978:387–97).

In 1833, a massive epidemic, believed to have been malaria, swept through the Sacramento valley (Cook 1955). The exact number of casualties is unknown, but it is estimated that 75 percent of the Maidu population were killed, leaving only a fraction of the original number to face the intruding miners and settlers that arrived when gold was discovered in Coloma in 1848.

Sierra Miwok

The southern portion of El Dorado County is located within what was recorded ethnographically as territory of the Sierra Miwok (Kroeber 1925). The Miwokan family of languages, a member of the Utian sub-stock, was made up of seven distinct languages variously situated in central California from Clear Lake south to the Bay Area and east to encompass the foothills and mountains of the central Sierra Nevada. Sierra Miwok was initially a single language, which developed into the Northern, Central, and Southern Miwok languages over time (Levy 1978). The central group occupied the foothills and mountains of the Stanislaus and Tuolumne river drainages. The name "Miwok", from Central Sierra Miwok *miwü* (person), was a construct of ethnographers and had little meaning to Miwok speakers, in that they did not consider themselves a single group. They were, instead, separate, independent tribelets which together shared common language and culture.

The Sierra Miwok economy was focused on the acquisition of seasonally available foods through logistically organized seasonal migration which appears to be a continuation of the settlement and subsistence strategy developed during the Late Archaic and Recent Prehistoric periods. During winter

populations concentrated in villages below snowline, and from spring to fall small groups dispersed to higher elevations to exploit ripening plant foods and available. Acorns, the Sierra Miwok's primary plant food, were stored for winter consumption in above-ground granaries and processed with nutting anvils, hammer stones, pestles, and portable and bedrock mortars. Gray and sugar pines were also important food sources, as were others that produced seeds and edible roots. Deer were the most important game animal to the Sierra Miwok, but bear, rabbits and a wide variety of small game were taken as well.

Washoe

The Washoe people inhabited the high-altitude portions of the County west and south of Lake Tahoe. The Washoe language is arguably associated with the Hokan language family, and as such is distinct from both the Penutian languages to the west (i.e., Maidu and Miwok) and the Uto-Aztecan languages to the east (i.e., Paiute) (Jacobsen 1986). d'Azevedo (1986) argues that these distinctions suggest the Washoe occupation of the high Sierras predates the arrival of Numic speakers in the western Great Basin, and may have begun as early as 6000 years ago.

By inhabiting different ecological zones from much of the Nisenan and Miwok areas, the Washoe adopted somewhat different economic, subsistence, settlement, and technological systems. For example, while the Nisenan and Miwok relied heavily on the acorn as a staple food, the Washoe exploited a wide variety of flora including camas bulbs, bitterroot, tule, cattail, wild rye, and pine nuts. Bedrock mortars are also found in Washoe areas, but they tend to be shallower and far less numerous than at lower elevations of the County, reflecting less use of food resources requiring extensive processing (El Dorado County 2003).

The types of resources associated with ethnographic or early historic periods of Native American occupation in the County differ little from those noted for later prehistoric periods. Sites and activity areas were still located in well-watered level areas and bedrock mortars were used for food processing until fairly recent times. Ethnographic village sites frequently exhibit large subterranean structure remains or house pits and can be more readily visible than the remnants of earlier Native American cultures and periods.

4.18.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact associated with tribal cultural resources if the Project would:

1. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
 - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of

Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

4.18.3 Impact Analysis

TCR-1 The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

The County acknowledges that tribal cultural resources (TCRs) may be present within the Project area and proposed individual fiber projects could cause a significant impact to such undocumented TCRs. Therefore, implementation of Mitigation Measure TCR-1 would address unanticipated discoveries of TCRs, and the proposed Project's potential impacts to unknown TCRs would be less than significant. The reduction of impact severity would be accomplished through the project-specific implementation of the procedural and substantive requirements of the regulations that govern AB 52 consultation; this will be done through the early identification of potential TCR impact scenarios and the collaborative consultative efforts to develop feasible measures to avoid or minimize such impacts.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure TCR-1: Tribal Consultation

El Dorado County shall conduct the appropriate tribal consultation outreach to relevant California Native American tribes, pursuant to PRC Section 21080.3.1, for all individual fiber projects included within the scope of the El Dorado County Broadband Fiber Project Program EIR. Pursuant to PRC Section 21080.3.1 (b), the tribes will have 30 days for AB 52 from the receipt of the request for consultation to either request or decline consultation, in writing, with the County for each proposed individual fiber project. In the event that a general plan or specific plan adoption or amendment is required for the implementation of an individual fiber project, the County shall comply with the requirements of Senate Bill 18 (SB 18), in coordination with AB 52, as described in California Government Code Section 65352.3.

Significance with Mitigation: Less than significant impact.

TCR-2 The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geologically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the

lead agency shall consider the significance of the resource to a California Native American tribe.

The County acknowledges that TCRs may be present within the Project area and proposed individual fiber projects could cause a significant impact to TCRs within the County. Therefore, implementation of Mitigation Measure TCR-1 would address an adverse change in the significance of TCRs, and the proposed Project's potential impacts to unknown TCRs would be less than significant.

Significance without Mitigation: Potentially significant impact.

See Impact TCR-1 for Mitigation Measure TCR-1.

Significance with Mitigation: Less than significant impact.

TCR-3 The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource inadvertently discovered during construction.

The County acknowledges that discoveries of an archaeological nature made during individual fiber project construction may qualify as TCRs, which could result in a significant impact to unknown TCRs within the County. Therefore, implementation of Mitigation Measure TCR-2 would address unanticipated discoveries of TCRs, and the Project's potential impacts to unknown TCRs would be less than significant. The reduction of impact severity would be accomplished through the project-specific implementation of the procedural and substantive requirements of the regulations that govern AB 52 consultation, and, where appropriate and with the assent of responding tribes, the application of documentation and/or data recovery efforts to obtain scientifically consequential information in a manner respectful of tribal sovereignty. This will offset the disturbance of the potential TCR in a manner that responds to the basis for its significance as informed by tribal input, information, and expertise.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure TCR-2: Archaeological Treatment and Tribal Consultation

In the event that potential tribal cultural resources (TCRs) are exposed during ground-disturbing activities, construction activities (e.g., grading, grubbing, or vegetation clearing) shall be halted in the immediate vicinity of the discovery. An archaeologist who meets the Secretary of the Interior's *Professional Qualifications Standards* shall then be retained to evaluate the resource's significance under CEQA in direct coordination with tribal members who would provide traditionally based cultural knowledge as a basis for collaboratively assessing said significance. If the discovery proves to be a potentially significant TCR, additional work and mitigation measures, such as those listed in Mitigation Measures CUL-1 and CUL-2, shall be implemented as deemed appropriate by the tribal organization consulting on the find. Such mitigation may include avoidance, data recovery excavation, or traditional ethnographic research into the cultural importance of the find to contemporary descendant communities.

Significance with Mitigation: Less than significant impact.

4.18.4 Cumulative Impacts

TCR-3 The proposed project may result in a cumulative impact with respect to tribal cultural resources.

Cumulative TCR impacts may occur when a series of actions leads to the loss of historically or archaeologically significant types of sites, buildings, deposits, or TCRs. For example, while the loss of a single historic building may not be significant to the character of a neighborhood or streetscape, continued loss of such historic resources on a project-by-project basis could amount to a significant cumulative effect. As discussed above, with the implementation of Mitigation Measures TCR-1 and TCR-2, the proposed Project would have less than significant impacts on unknown TCRs.

The analysis of cumulative impacts is based on impacts of the proposed Project and other projects and plans/projections in the County as listed in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis. The analysis is based on a combination of the list and plans/projections approaches, which includes various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. As such, each cumulative project that would be subject to CEQA would be required to assess its potential impact on tribal cultural resources. Mitigation measures conducted for each cumulative individual fiber project would ensure that impacts on TCRs are minimized to the maximum extent feasible. Therefore, with implementation of Mitigation Measures TCR-1 and TCR-2, and the requirement for the other cumulative projects subject to CEQA to conduct tribal consultation, no cumulatively considerable impact on TCRs would occur with approval of the proposed Project.

Significance without Mitigation: Potentially significant impact.

See Impacts TCR-1 for Mitigation Measure TCR-1 and see Impact TCR-3 for Mitigation Measure TCR-2.

Significance with Mitigation: Less than significant impact.

4.18.5 References

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4.19 UTILITIES AND SERVICE SYSTEMS

This section describes the regulatory framework and existing conditions related to utilities and service systems, evaluates the potential impacts to water, sanitary sewers, storm drainage, solid waste facilities, and energy systems as a result of implementation of the proposed Project. The potential effects on utilities and service systems were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to utilities and service systems.

4.19.1 Environmental Setting

4.19.1.1 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for utilities and service systems. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Clean Water Act

Section 304 of the Clean Water Act (CWA) establishes primary drinking water standards and requires states to ensure that potable water retailed to the public meets these standards. State primary and secondary drinking water standards are established in California Code of Regulations Title 22, Sections 64431–64501. Secondary drinking water standards incorporate non-health risk factors including taste, odor, and appearance. The National Pollutant Discharge Elimination System (NPDES) regulates the discharge of drainage to surface waters. Municipal storm drainage is required to meet board standards under waste discharge regulations and NPDES permits. Federal NPDES regulations are administered by the State Water Resources Control Board (SWRCB) and through the Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB regulates water quality within the west slope of El Dorado County and the Lahontan RWQCB regulates water quality within the portion of the County located in the Tahoe Basin.

State Regulations

Porter-Cologne Water Quality Control Act (Section 13000 et seq.)

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, CWA Section 401 water quality certifications, or other approvals.

California Energy Commission

The California Energy Commission (CEC) regulates the provision of natural gas and electricity within the State. The CEC is the State's primary energy policy and planning agency and has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal power plants 50 megawatts or larger, promoting energy efficiency through appliance and building standards, developing energy technologies and supporting renewable energy, and planning for and directing the State response to energy emergencies.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) was adopted to redefine waste management practices and to minimize the volume and toxicity of solid waste that is disposed at landfill facilities in the State. The California Integrated Waste Management Board is the State agency designated to oversee, manage, and track California's 76 million tons of waste generated each year. It is one of the six agencies under the umbrella of the California Environmental Protection Agency. The California Integrated Waste Management Board develops laws and regulations to control and manage waste; enforcement authority is typically delegated to the local government. The board works jointly with local government to implement regulations and fund programs.

Pursuant to the California Integrated Solid Waste Management Act of 1989, all cities in California are required to reduce the amount of solid waste disposed in landfills. Contracts that include work that will generate solid waste, including construction and demolition debris, have been targeted for participation in source-reduction, reuse, and recycling programs. Contractors are urged to manage solid waste to divert waste from landfills (particularly Class III landfills) and to maximize source reduction, reuse, and recycling of construction and demolition debris.

Assembly Bill 1826

AB 1826 requires that State agencies, businesses, and multifamily complexes that generate specific quantities of organic or solid waste each week enroll in organic recycling programs through an applicable solid waste disposal company. Organic recycling programs may take the form of composting, mulching, or anaerobic digestion. Businesses and multifamily residential housing complexes that generate the following quantities are required to implement organic or solid waste recycling programs under AB 1826:

- Eight or more cubic yards of organic waste per week as of April 1, 2016.
- Four or more cubic yards of organic waste per week as of January 1, 2017.
- Four or more cubic yards of solid waste per week as of January 1, 2019.
- Two or more cubic yards of solid waste per week as of January 1, 2020, if Statewide disposal of organic waste is not already reduced by half.

The California Department of Resources Recycling and Recovery (CalRecycle) has determined that California has not achieved its Statewide organic disposal goal of reducing organic waste disposal to 50 percent of 2014 levels by 2020, and therefore organic composting and recycling requirements have

been expanded such that businesses that generate 2 or more cubic yards of solid waste per week must comply with the requirements of AB 1826 (CalRecycle 2024).

Regional Regulations

Tahoe Regional Planning Agency

The eastern portion of the County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe's importance as a state and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has primary land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances may apply to the Project:

Chapter 35, *Natural Hazard Standards*, sets forth regulations pertaining to recognition of natural hazards, prevention of damage to property, and protection of public health relating to such natural hazards. It implements provisions of the Goals and Policies and the Water Quality Management Plan for the Lake Tahoe Region pertaining to avalanche and mass instability, floodplains, and wildfire.

Chapter 60, *Water Quality*, sets forth standards for the discharge of runoff water from parcels and regulates the discharge of domestic, municipal, or industrial wastewater. These standards and prohibitions apply to discharges to both surface waters and ground waters.

TRPA Regional Plan

Utilities and service systems are addressed in the Water Quality sub-element of the *Land Use Element* of the TRPA Regional Plan (TRPA 2024b). The Water Quality sub-element contains the following goal and policies that apply to the Project:

- **Goal WQ-2:** Reduce or eliminate point sources of pollutants which affect, or potentially affect, water quality in the Tahoe Region.
 - **Policy WQ-2.3:** Underground storage tanks for sewage, fuel, or other potentially harmful substances shall meet standards set forth in TRPA ordinances, and shall be installed, maintained, and monitored in accordance with the Best Management Practices Handbook. Leaking underground tanks are a nationwide water quality problem. In the Tahoe Region, the environmental impacts of leaking tanks may be especially noticeable and harmful to the environment
 - **Policy WQ-2.4:** No person shall discharge solid waste in the Lake Tahoe Region by depositing them on or in the land, except as provided by TRPA ordinance. Landfilling or other practices for disposing of solid wastes can add harmful biological oxygen demand,

nutrients, and toxic substances to the watershed of Lake Tahoe. Therefore, the control of solid waste disposal is necessary to protect and enhance water quality. Existing state policies and laws will continue to govern solid waste disposal in the Tahoe Region.

Tahoe Sierra Integrated Regional Water Management Plan

The Tahoe Sierra Integrated Regional Water Management Plan (IRWMP) was developed in 2006 by the Tahoe Sierra Regional Water Management Group, a collaboration of 16 public agencies, special districts, nonprofit organizations, and educational institutions. The IRWMP integrates a set of coordinated strategies for the management of water resources and for the implementation of projects that protect the participating communities from drought, protect and improve water quality, and improve local water security. The IRWMP is based on historical research and development of other water management and land use planning documents in the region (City of South Lake Tahoe 2010).

Local Regulations

El Dorado Water Agency – Water Resources Development and Management Plan

The El Dorado Water Agency (EDWA) works with local, regional, State, and federal partners to provide an integrated water management approach to ensure the County has reliable, accessible, and affordable water to meet urban and agricultural needs. EDWA completed the 2019 Water Resource Development and Management Plan (WRDMP) for El Dorado County, which outlines the framework for managing the County's water resources through 2040. It addresses the need for a reliable water supply, protection of water quality, and infrastructure enhancements. The WRDMP includes a comprehensive assessment of current water resources, projections for future demand, and measures to improve water conservation and system resilience. It underscores the necessity of aligning land use planning with water resource management to tackle issues such as drought, climate change, and population growth (EDWA 2019).

Western El Dorado County Storm Water Management Plan

The 2004 Western El Dorado County Storm Water Management Plan (SWMP) outlines a program to reduce the discharge of pollutants associated with the stormwater drainage systems serving the West Slope of the County. The Western El Dorado County SWMP only addresses the water quality component of the integrated management of stormwater resources approach envisioned for a Western El Dorado County SWMP. The Western El Dorado County SWMP's proposed stormwater management program includes public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and pollution prevention/good housekeeping. The Western El Dorado County SWMP also describes the County's monitoring, program evaluation, and reporting program, which includes collecting information on problem pollutants, monitoring the performance of stormwater controls in addressing the pollutants, and annually reporting progress and updates to the RWQCB. The Western El Dorado County SWMP requires compliance with the *Grading, Erosion, and Sediment Control Ordinance*, the El Dorado County Design and Improvement Standards Manual, and the El Dorado County Drainage Manual, which focuses on drainage priorities and provides criteria and procedures for the analysis and design of drainage facilities.

El Dorado County Code

Chapter 110.14, *Grading, Erosion, and Sediment Control*, regulates grading within the unincorporated areas of El Dorado County in order to protect life, limb, health, property and public welfare; avoid pollution of watercourses; and ensure that the intended use of a graded site is consistent with the General Plan and any specific adopted plans, including the Western El Dorado County Storm Water Management Plan, State Fire Safe Standards, and relevant El Dorado County ordinances. The ordinance establishes the procedures for the issuance of grading permits, approval of plans, and inspection of construction sites. The ordinance also requires that waterways and adjacent properties be protected from erosion, flooding, or sediment deposits that could result from grading activities.

El Dorado County General Plan

Utilities and service systems are addressed within the *Public Services and Utilities Element* of the County General Plan. The *Public Services and Utilities Element* contains the following goals, objectives, policies, and implementation measures that apply to the Project (County 2015):

- **Goal 5.1: Provision of Public Services.** Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.
 - **Objective 5.1.2:** Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.
 - **Policy 5.1.2.1:** Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1 (See Table 4.19-1), demand is determined to exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a CIP project is funded and authorized which will increase service capacity.
 - **Policy 5.1.2.2:** Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5-1 (See Table 4.19-1). The following Levels of Service shall apply to the review of discretionary projects.

- **Policy 5.1.2.3:** New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. Lack of available public or private services or adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project or cause for the reduction of size, density, and/or intensity otherwise indicated on the General Plan land use map to the extent allowed by State law.

Table 4.19-1
EL DORADO COUNTY MINIMUM LEVELS OF SERVICE

Service	Community Region	Rural Center and Rural Region
Public water source	As determined by purveyor	As determined by purveyor, when applicable
Private wells	Environmental Management	Environmental Management
Public water treatment capacity	As determined by purveyor	As determined by purveyor
Public sewer treatment capacity	As determined by purveyor	As determined by purveyor
On-site sewage disposal	Environmental Management	Environmental Management
Storm drainage	Department of Transportation	Department of Transportation
Solid waste	Environmental Management	Environmental Management
County and State road circulation system	<i>E (Level of Service)</i>	<i>D (Level of Service)</i>
Schools	As determined appropriate by the school districts	As determined appropriate by the school districts
Parks	Specific plan for new communities or Quimby Fee/dedication program for tentative maps	Specific plan for new communities or Quimby Fee/dedication program for tentative maps
Fire district response	8-minute response to 80% of the population	15 to 45-minute response
Sheriff	8-minute response to 80% of the population	No standard
Ambulance	10-minute response to 80% of the population	20-minute response in Rural Regions and “as quickly as possible” in wilderness areas*

*In accordance with State standards

Source: County 2015

- **Goal 5.2: Water Supply.** The development or acquisition of an adequate water supply consistent with the geographical distribution or location of future land uses and planned developments.
 - **Objective 5.2.1:** Establish a County-wide water resources development and management program to include the activities necessary to ensure adequate future water supplies consistent with the General Plan.
 - **Policy 5.2.1.3:** All medium-density residential, high-density residential, multifamily residential, commercial, industrial and research and development projects may be required to connect to public water systems if reasonably available when located within Community Regions and to either a public water system or to an approved private water systems in Rural Centers.

- **Policy 5.2.1.11:** The County shall direct new development to areas where public water service already exists. In Community Regions, all new development shall connect to a public water system. In Rural Centers, all new development shall connect either to a public water system or to an approved private water system
- **Goal 5.3: Wastewater Collection and Treatment.** An adequate and safe system of wastewater collection, treatment, and disposal to serve current and future County residents.
 - **Objective 5.3.1: Wastewater Capacity.** Ensure the availability of wastewater collection and treatment facilities of adequate capacity to meet the needs of multifamily, high-, and medium-density residential areas, and commercial and industrial areas.
 - **Policy 5.3.1.1:** High-density and multifamily residential, commercial, and industrial projects may be required to connect to public wastewater collection facilities if reasonably available as a condition of approval. In the Rural Centers of Camino/Cedar Grove/Pollock Pines, the long-term development of public sewer service shall be encouraged.
 - **Policy 5.3.1.7:** In Community Regions, all new development shall connect to public wastewater treatment facilities. In Community Regions where public wastewater collection facilities do not exist project applicants must demonstrate that the proposed wastewater disposal system can accommodate the highest possible demand of the project.
- **Goal 5.5: Solid Waste.** A safe, effective and efficient system for the collection and processing of recyclable and transformable materials and for the disposal of residual solid wastes which cannot otherwise be recycled or transformed.
 - **Objective 5.5.2: Recycling, Transformation, and Disposal Facilities.** Ensure that there is adequate capacity for solid waste processing, recycling, transformation, and disposal to serve existing and future users in the County.
 - **Policy 5.5.2.1:** Concurrent with the approval of new development, evidence will be required that capacity exists within the solid waste system for the processing, recycling, transformation, and disposal of solid waste.
- **Goal 5.6: Gas, Electric, and Other Utility Services.** Sufficient utility service availability consistent with the needs of a growing community.
 - **Objective 5.6.1: Provide Utility Services.** Community Regions shall be provided with adequate and reliable utility services such as gas, electricity, communication facilities, satellite and/or cable television, and water distribution facilities, while recognizing that levels of service will differ between Community Regions, Rural Centers, and Rural Regions.
 - **Policy 5.6.1.1:** Promote and coordinate efforts with utilities for the undergrounding of existing and new utility distribution lines in accordance with current rules and regulations of the California Public Utility Commission and

existing overhead power lines within scenic areas and existing Community Regions and Rural Centers.

- **Implementation Measure PS-B:** Review the County Code to identify revisions that could accomplish the following:
 - Require and specify the nature of findings to be made by the approving body that a proposed project meets minimum standards for the provision of emergency services, including emergency water supply and conveyance and emergency access, and emergency service facilities. [Policy 5.1.2.1]
- **Implementation Measure PS-E:** Work with the Water Agency and public water providers to establish a water resources development and management program. [Objective 5.2.1]
- **Implementation Measure PS-F:** Work with the Water Agency and water service providers to establish a process to review ministerial and discretionary project applications reliant upon surface or groundwater for the ability to be adequately served by the proposed water system. Process to include:
 - Water demand standards based on types and sizes of uses to serve as a basis for determining the adequacy of a proposed water supply for new development [Policy 5.2.1.3]
- **Implementation Measure PS-J:** Establish a process to review discretionary permit applications reliant upon any non-public community wastewater treatment system for the ability to be adequately served by the proposed system. Process to include development of wastewater treatment standards based on types and sizes of uses to serve as a basis for determining the adequacy of a proposed treatment method. [Policy 5.3.1.1]
- **Implementation Measure PS-N:** Establish a means, either through formal agreement or through the identification of formal contacts, to coordinate a long-term planning process with private utility providers regarding the location and types of future utility delivery facilities, including the following:
 - Undergrounding of utilities. [Policy 5.6.1.1]

City of Placerville City Code

Chapter 8.7, *Grading Ordinance*, sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of plans and inspection of grading construction and all grading specific to single parcel site improvements, except single-family residence construction unless exceeding prescriptive standards as defined in the City's design and improvement standards manual. Where the grading or earthwork involves multiple parcels, parcel maps, subdivisions, land divisions, or roads the design and improvement standards manual shall be used for design purposes.

Chapter 7.15, *Stormwater Quality Ordinance*, intends to ensure that the City of Placerville is compliant with State and federal laws and fulfills its requirements to: 1) protect the health, safety, and general welfare of the citizens of the city of Placerville; 2) enhance and protect the quality of waters of the state

in the City of Placerville by reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to a stormwater facility; and 3) to cause the use of BMPs by the City and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the State.

City of Placerville General Plan

Utilities and service systems are addressed within *Section IV – Public Facilities and Services* of the City of Placerville General Plan (City of Placerville 2004). The *Public Facilities and Services* section contains the following goals and policies that apply to the Project:

- **Goal A:** To maintain an adequate level of service in the City of Placerville’s water system to meet the needs of existing and projected development.
 - **Policy 1:** The City of Placerville shall work with the El Dorado Irrigation District to develop new water storage facilities and major distribution lines as necessary to serve new development.
 - **Policy 4:** The City of Placerville shall continue to assess a capital improvement fee on all new commercial, industrial, and residential development sufficient to fund system-wide capacity improvements. The capital improvement fee schedule shall be periodically reviewed and revised, as necessary.
- **Goal B:** To maintain an adequate level of service in the City of Placerville’s sewage collection and disposal system to meet the needs of existing and projected development.
 - **Policy 1:** The City of Placerville shall develop new sewage treatment and trunkline capacity as necessary to serve new development.
 - **Policy 7:** The City of Placerville shall continue to assess a capital improvement fee on all new commercial, industrial, and residential development sufficient to fund systemwide capacity improvements. The capital improvement fee schedule shall be periodically reviewed and revised, as necessary.

City of South Lake Tahoe City Code

Chapter 7.20, *Grading, Erosion and Sediment Control*, is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) To avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and (3) To ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and State or federal law, this chapter shall prevail unless preempted by the State or federal law. In the event of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Utilities and service systems are addressed within the *Public/Quasi-Public Facilities and Services Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011). The *Public/Quasi-Public Facilities and Services Element* contains the following goals and policies that apply to the Project:

- **Goal PQP-1:** To ensure the timely maintenance, expansion, and upgrade of public facilities and services for the entire community.
 - **Policy PQP-1.1: Infrastructure Expansion in Under-Served Areas.** The City of South Lake Tahoe shall coordinate and prioritize infrastructure expansion and/or improvements in areas that are under-served.
 - **Policy PQP-1.2: Provider Requirements.** The City of South Lake Tahoe shall work within available legal means to ensure statutory requirements are met by all providers.
- **Goal PQP-2:** To work with local providers to ensure an adequate and safe water supply and delivery system for the entire community.
 - **Policy PQP-2.3: New Well Construction.** The City of South Lake Tahoe shall not allow the construction of any new groundwater wells except to replace existing wells.
- **Goal PQP-4:** To protect water quality of streams and Lake Tahoe by reducing pollutant loads associated with urban stormwater runoff.
 - **Policy PQP-4.2: Minimize Stormwater Runoff.** The City of South Lake Tahoe shall continue to implement programs and policies to address drainage (i.e., excessive water quantity) and pollution (i.e., impaired water quality) problems, by promoting development and retrofits that minimize the discharge of stormwater runoff to the City's stormwater infrastructure.
 - **Policy PQP-4.3: Stormwater Detention/Retention.** The City of South Lake Tahoe shall require all projects to either detain or retain stormwater runoff on-site whenever physically possible and economically efficient or, if not possible or efficient, to contribute to the construction and long-term maintenance of off-site water quality measures.
- **Goal PQP-8:** To promote provision of adequate levels of utility services by private companies and to ensure that these are constructed in a fashion that minimizes their negative effects on surrounding development and maximizes energy efficiency.
 - **Policy PQP-8.1: Development and Remodel Coordination.** The City of South Lake Tahoe shall communicate its major development and infrastructure plans with utility companies and coordinate planning to ensure adequate and timely utility connections.
 - **Policy PQP-8.2: Underground Utility Requirement.** The City of South Lake Tahoe shall continue to require underground installation of electrical distribution utility lines in new and substantially remodeled projects as a condition of permit approval, except where infeasible for operational reasons.

- **Policy PQP-8.3: Promote Technology.** The City of South Lake Tahoe shall promote technological improvements and upgrading of utility services in South Lake Tahoe.
- **Policy PQP-8.4: Coordination with Utility Providers.** The City of South Lake Tahoe shall coordinate with gas and electricity service providers to site and design gas and electric systems to minimize environmental, aesthetic, and safety impacts to existing and future residents.
- **Policy PQP-8.5: Digital Communications Infrastructure.** The City of South Lake Tahoe shall facilitate installation of digital communications infrastructure.
- **Goal PQP-11:** To provide efficient snow removal on public streets and sidewalks to promote safe, year-round access to these facilities.
 - **Policy PQP-11.8: Water Quality Impacts from Snow Removal Operations.** The City of South Lake Tahoe shall consider the use of alternative abrasives and deicers, and other modifications to snow removal practices, to reduce the discharge of fine particulates and other sediment associated with City of South Lake Tahoe snow removal operations. The City of South Lake Tahoe shall also consider measures to reduce the threats to water quality associated with sediment discharged to City of South Lake Tahoe stormwater infrastructure from snow removal operations on private lands.

4.19.1.2 Existing Conditions

Water Supply

The major water supply source in El Dorado County is surface water diverted from streams and reservoirs and conveyed to water users via canals and pipelines after it is treated at treatment plants. Access to groundwater is relatively limited (compared to surface water) as a result of geologic conditions and the related fragmented/fractured rock groundwater system found in the County, although groundwater remains the primary source of water in rural areas. Water supply availability is a function of natural conditions, such as climate (precipitation and evaporation), soil permeability, topography, and hydrogeology (including the capacity, location, and quality of aquifers), as well as management activities such as the construction and operation of distribution, storage, and treatment facilities.

There are six public water purveyors in El Dorado County. El Dorado Irrigation District (EID), Georgetown Divide Public Utility District (GDPUD), City of Placerville, and Grizzly Flats Community Services District (GFCSD) serve surface water in the West Slope. The City of Placerville receives wholesale water from EID. South Lake Tahoe Public Utility District (STPUD) serves groundwater, and Tahoe City Public Utility District (TCPUD) serves water from both groundwater and spring wells in the Tahoe Basin. These purveyors' service areas do not cover the entirety of the County. Residential properties, farms, ranches, and businesses outside these purveyors' boundaries primarily rely on groundwater. In the west slope of the County, shallow groundwater wells are used, and in the Tahoe Basin, groundwater is extracted from either the Tahoe South or Tahoe West Subbasin (EDWA 2019).

Wastewater Systems

Two wastewater collection systems and treatment plants (WWTP) operate in the west slope of the County, both owned and operated by EID: El Dorado Hills WWTP and Deer Creek WWTP. All of the

wastewater produced on the west slope of the County outside the EID collection system service area is treated by onsite wastewater treatment systems (OWTS). These systems are also referred to as septic systems and typically include an underground septic tank connected to a house, business, or public facility and underground leach fields that emit a plume of wastewater. The County operates the Union Mine Septage Treatment and Disposal Facility. This facility accepts septage from OWTS throughout the County, treats it, and disposes the waste byproducts (County 2003).

STPUD provides wastewater treatment services to those areas of the Tahoe Basin in El Dorado County, including the entire City of South Lake Tahoe and most areas to the west and south of the city limits in the City's sphere of influence (SOI; City of South Lake Tahoe 2010).

Stormwater Drainage

Flooding is the primary hazard related to stormwater runoff and urban development generally increases the number of impervious surfaces. When rainfall or snowmelt exceeds the ground infiltration rate (i.e., the ability of the ground to absorb water), stormwater runs off and collects in drainage facilities, which may be in the form of roadways, storm drains, and natural creeks and rivers. The net effects of additional impervious surfaces are increases in the flow rate and volume of water in the drainage channels during and after a storm event. When the volume of water exceeds the capacity of the drainage channel to convey water, flooding can result. Hazards associated with localized flooding include the overtopping of roadways, inundation of areas near the drainage channels, and structural damage. Stormwater runoff may also contribute to regional flooding (County 2003).

The western slope of El Dorado County contains three major watersheds, each of which drains into one of these major rivers: the Middle Fork American River, the South Fork American River, and the Cosumnes River. The Tahoe Basin contains two major watersheds that meet within the City of South Lake Tahoe city limits: the Trout Creek and Upper Truckee River watersheds (City of South Lake Tahoe 2010).

Lake Tahoe is listed as a Water Quality Limited Segment under Section 303(d) of the federal Clean Water Act. There has been a noticeable decline in the clarity of Lake Tahoe over the past several decades, which has been attributed to increased human activities such as urbanization within the watershed's tributary to the lake and from atmospheric deposition from sources in the watershed and from regionally adjacent areas (City of South Lake Tahoe 2010).

Electricity

Electricity on the west slope of El Dorado County is supplied by Pacific Gas and Electric Company (PG&E). PG&E owns and operates electricity infrastructure in the County and throughout Northern California that includes power lines, powerhouses, and substations. PG&E produces some of its own power and purchases some of its electricity through the Independent System Operator, which obtains electricity from a number of companies that operate power plants throughout the Western Grid (County 2003).

NV Energy (formerly Sierra Pacific Power) provides electrical service to the City of South Lake Tahoe and the City's sphere of influence (SOI). NV Energy provides electrical services through regulated public utility contracts. The utility company is bound by contract to update its systems to meet any additional demands. NV Energy's service territory covers approximately 50,000 square miles in western, central, and northeastern Nevada and northeastern California including the Lake Tahoe area. NV Energy has 12,636 circuit miles of electric transmission lines and 34,678 miles of aboveground and underground

electric distribution lines. In California, NV Energy operates two distribution substations, one in Meyers and one in Stateline. Distribution lines have a primary voltage of 14,400 volts (City of South Lake Tahoe 2010).

The Sacramento Municipal Utility District (SMUD) also owns and maintains power lines in El Dorado County; however, it does not provide electricity services to users in the County.

Natural Gas

PG&E supplies natural gas on the west slope of El Dorado County. Natural gas distribution lines only extend from the Sacramento County line to the community of El Dorado Hills and the El Dorado Hills Business Park. The households in the remaining portions of the west slope of the County use either electric energy or propane in place of natural gas (County 2003).

Southwest Gas Corporation (Southwest) provides natural gas service to the City of South Lake Tahoe and the City's SOI. Southwest provides natural gas service through federal- and state-regulated public utility rules and tariffs. The utility company is bound by these rules and tariffs to update its systems to meet any additional residential customer demands. Southwest also provides natural gas distribution and procurement. Services are provided within three counties of its northern California certificated service areas with a total service area of approximately 90 square miles. Southwest's service area in northern California includes the Truckee, Donner Lake, North Lake Tahoe, and South Lake Tahoe areas. Southwest provides services utilizing approximately 1,230 miles of natural gas distribution pipelines and serves approximately 38,000 natural gas distribution customers (City of South Lake Tahoe 2010).

Propane

Propane, also known as liquefied petroleum gas, is used as an additional energy source to electric energy in areas of the County without access to natural gas distribution lines. From the refinery or processing plant, propane is shipped to an intermediate terminal; from there it is shipped to the local propane supplier for delivery to commercial and residential end users. All propane is transported under pressure in its more compact liquid form. Typically, propane is transported by trucks or pipelines. Propane used in the County is transported to privately owned and operated local propane suppliers, which store propane in "bulk plants" on their premises. In El Dorado County, bulk plants typically have 18,000–30,000 gallons of storage capacity (County 2003).

Telecommunications

Internet service in the west slope of the County is provided by several internet service providers (ISPs) including but not limited to: Earthlink, AT&T, Xfinity, T-Mobile, Verizon, Zeta, and Cal.net. AT&T is the only ISP for the City of South Lake Tahoe and the City's SOI (City of South Lake Tahoe 2010). While some areas of the County have sufficient internet speeds for daily work and home life, there are still large portions of the County with no coverage or coverage so slow that it has become prohibitive to perform essential daily tasks.

Solid Waste Collection

The Solid Waste and Hazardous Materials Division, through exclusive contracts with private solid waste collection and disposal companies, is responsible for the comprehensive planning of solid waste reduction, recycling, and resource recovery in El Dorado County. The County contains two material

recovery facilities (MRFs): the El Dorado Disposal MRF, which serves the west slope of El Dorado County from its location in Diamond Springs; and the South Lake Tahoe Refuse/Transfer Station MRF, which serves the Tahoe Basin portion of the County.

El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to the El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia, and green waste is sent to a processing facility in Sacramento. The County currently has franchise agreements with solid waste companies to provide solid waste collection services, including Waste Connections of California, Inc., doing business as (dba) El Dorado Disposal Service; South Tahoe Refuse Company, Inc., dba South Tahoe Refuse; and Tahoe Truckee Disposal Company, Inc., dba Tahoe Truckee Sierra Disposal (County 2024).

4.19.2 Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on utilities and service systems if the Project would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or,
5. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

4.19.3 Impact Analysis

UTL-1 The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public rights-of-way (ROW). The fiber optic infrastructure could follow other utility installations; therefore, it is likely that the ground along these alignments has been previously disturbed

by prior utility work. The installation of broadband infrastructure would not interfere with the continuation of existing aboveground uses after construction is completed.

Through use of a U.S. Department of Commerce, Economic Development Administration (EDA) technical assistance and planning grant, El Dorado County conducted a Broadband Needs Assessment and Feasibility Study (Study) in 2017. According to the preliminary engineering report, numerous areas in the County lacked sufficient broadband service, and much of the County does not have access to the minimum definition of broadband services of 25/3 Mbps. Per the State of California's definition, areas with less than existing 25/3 Mbps are considered "unserved" and areas with less than existing 100/20 Mbps are considered "underserved". These unserved, and underserved populations in California are missing out on what is now seen as a utility critical to maintaining a basic quality of life. Implementation of the proposed Project would help attract broadband infrastructure investors to bring broadband service to a County in need of reliable connectivity for health and safety, economic, and quality of life reasons, as discussed in Section 3.1, *Project Need*. Although the proposed Project would allow for the construction of new telecommunication facilities, this program EIR analyzes all potential environmental impacts.

The fiber optic conduit would not require potable water for construction or operation of the Project that could subsequently result in wastewater generation. As no wastewater would be generated, the proposed Project would not exceed wastewater treatment requirements of the Central Valley RWQCB or the Lahontan RWQCB. No new wastewater treatment facilities, or expansion of such facilities, would be required. Construction of individual fiber projects could involve minimal use of water for dust control per El Dorado County Air Quality Management District (EDCAQMD) Rule 223-2, which would be readily available from existing sources. Operation of the fiber optic facilities would not require additional water supplies as the projects would not use water and no new population would be generated. Therefore, no new water treatment or supply facilities would be required.

Construction of individual fiber projects could occur in areas with existing stormwater drainage facilities. Once fiber optic conduits are installed, the ground surface along the individual fiber optic line alignments would be restored to its previous condition (paved or unpaved). Therefore, the amount of pervious and impervious surfaces would not be significantly altered upon completion of individual fiber projects. As such, the proposed Project would not require new or expanded stormwater facilities.

Additionally, fiber optic lines do not carry an electrical charge, instead they utilize light to transmit signals (Fluke Networks 2022). As such, installation of the fiber optic lines would not require the use of electricity or natural gas for construction or operation, and no new or expanded electric power or natural gas utilities would be required.

Therefore, the proposed Project would not require the relocation or construction of new or expanded facilities that would cause significant environmental effects, and the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

UTL-2 The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Construction of individual fiber projects could involve minor use of water for dust control per EDCAQMD Rule 223-2, which would be readily available from existing sources within the County. As discussed in Section 4.14, *Population and Housing*, it is reasonable to assume that implementation of the proposed Project would contribute to the retention of existing residents and businesses, which could indirectly contribute to a limited amount of future growth. However, the potential for this growth would be limited and would not substantially increase the County population. Therefore, operation of the individual fiber projects would not require additional water supplies as no significant population increase would be generated. Therefore, the proposed Project would not result in additional water demand and would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. The impact would be less than significant.

Significance without Mitigation: Less than significant impact.

UTL-3 The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Construction and operation of the proposed Project would not require potable water such that substantial wastewater generation would occur. During construction, it is anticipated that portable toilets and drinking water supplies could be provided for workers. The minimal wastewater generated would be hauled to an approved facility for treatment/disposal. As wastewater associated with portable toilets would be a temporary and minimal demand, the proposed Project would not exceed wastewater treatment requirements of the Central Valley RWQCB or the Lahontan RWQCB, and no new wastewater treatment facilities, or expansion of such facilities would be required. Additionally, no wastewater would be generated during operation of individual fiber projects. Therefore, the impact would be less than significant.

Significance without Mitigation: Less than significant impact.

UTL-4 The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

UTL-5 The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

CALGreen mandates locally permitted construction and demolition projects to recycle and/or salvage for reuse a minimum 65 percent of the nonhazardous construction and demolition debris generated during construction activities (CALGreen Sections 4.408, 5.408, 301.1.1 and 301.3). The El Dorado County Solid Waste and Hazardous Materials Division is responsible for the comprehensive planning of solid waste reduction, recycling, and resource recovery in El Dorado County, and is responsible for ensuring that solid waste disposal services meet State and federal mandates for integrated waste management. El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in

Sacramento. Pursuant to the El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County.

Construction of individual fiber projects under the proposed Project would generate minimal solid waste, which is expected to include the packaging of fiber optic lines, asphalt, vegetation and debris removal, etc. Operation of individual fiber projects would not generate solid waste. Due to the minimal amount of solid waste generated by construction of individual fiber projects, the Project would not adversely affect the applicable jurisdiction's abilities to comply with the State waste diversion requirements. Therefore, the proposed Project would not exceed State or local solid waste standards or infrastructure capacity, nor would it fail to comply with solid waste reduction goals. The impact for Impact UTL-4 and UTL-5 would be less than significant.

Significance without Mitigation: Less than significant impact.

4.19.4 Cumulative Impacts

UTL-6 The proposed project would not result in a significant cumulative impact with respect to utilities.

Cumulative impacts would occur when the proposed Project, in combination with other projects or plans/projections in the County, would require or result in the construction of new or expanded utilities, have insufficient water supplies to serve the projects, result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand, generate solid waste in excess of local capacity, or not comply with federal, State, and local solid waste regulations. Potential impacts to utilities and service systems are evaluated on the level at which the service is provided, which may be Countywide or more local depending on the service. As discussed above under Impact UTL-1 through UTL-5, implementation of the proposed Project would result in a less than significant impact related to utilities and service systems.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other cumulative projects in the County. As shown in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis, numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. Construction and operation of individual fiber projects would result in small but incremental impact to utilities. Although the proposed Project would construct new telecommunication facilities, this program EIR analyzes all potential environmental impacts. All projects in El Dorado County, including the proposed Project and the cumulative projects considered in this analysis, would be subject to the applicable jurisdictions' general plan policies that require projects to demonstrate adequate utility infrastructure prior to project approval. As discussed above, the proposed Project would not require or result in the construction of new or expanded utilities or result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand. Construction and operation of individual fiber projects would not generate solid waste in excess of local capacity. Additionally, the Project would have sufficient water supplies to serve the projects and would comply with federal, State, and local solid waste regulations. Therefore, the impact would be less than cumulatively considerable.

Significance without Mitigation: Less than significant impact.

4.19.5 References

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4.20 WILDFIRE

This section describes the regulatory framework and existing conditions related to wildfire and evaluates the potential impacts that could occur as a result of implementation of the proposed Project. The potential effects on public services were evaluated according to Appendix G of the California Environmental Quality Act (CEQA) Guidelines to determine their level of significance. No issues were identified or raised during scoping that pertained to wildfire.

4.20.1 Environmental Setting

4.20.1.1 Regulatory Framework

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the CEQA review process for wildfire. These policies provide context for the impact discussion related to the proposed Project's consistency with the applicable regulatory conditions.

Federal Regulations

Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 provides the legal basis for the Federal Emergency Management Agency's (FEMA) mitigation planning requirements for State, local, and tribal governments as a precursor to mitigation grant assistance. The Disaster Mitigation Act of 2000 requires that local governments prepare a Local Hazard Mitigation Plan that must be reviewed by the State Mitigation Officer, approved by FEMA, and renewed every five years. The plan must include a planning process, a risk assessment, a mitigation strategy, and plan maintenance and updating procedures to identify the natural hazards, risks, and vulnerabilities of the area under the jurisdiction of the government. Natural hazards include earthquakes, tsunamis, tornadoes, hurricanes, floods, and wildfires.

State Regulations

California Fire Code

The California Fire Code (CFC) is Part 9 of the California Code of Regulations (CCR) Title 24, Building Standards Code. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, fire hydrant locations and distribution, and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. Chapter 49 of the CFC contains requirements for Wildland-Urban Interface (WUI) areas and prescribes construction materials and methods in fire hazard severity zones (FHSZ); requirements generally parallel the California Building Code (CBC) Chapter 7A. The CFC is updated on a three-year cycle; the current 2022 CFC took effect on January 1, 2023.

California Public Resources Code

California Public Resources Code (PRC) Sections 4291 *et seq.* require that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability, may be maintained; as may single specimens of trees or other vegetation that are maintained so as to manage fuels and not form a

means of rapid-fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the CFC.

State Responsibility Areas (SRA) are defined by PRC Section 4102 as areas of the State in which the California Board of Forestry and Fire Protection has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where the California Department of Forestry and Fire Protection (CAL FIRE) has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value. In practice, some local government agencies (in this case, local volunteer fire districts), may also provide first response in some SRAs, in coordination with their local CAL FIRE unit. PRC Sections 4201-4204 directs CAL FIRE to map fire hazards within SRAs based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These FHSZ classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone.

Federal Responsibility Areas (FRA) are lands owned and managed by the federal government, which bears regulatory and financial responsibility for wildfire prevention and suppression on those lands.

Local Responsibility Areas (LRA) include lands that do not meet criteria for SRAs or FRAs, or are lands in incorporated areas, cultivated agricultural lands, and nonflammable areas in the unincorporated parts of a county. LRAs can include flammable vegetation and wildland-urban interface areas. LRA fire protection is provided by city or local fire departments, fire protection districts, county fire departments, or by contract with CAL FIRE.

PRC Section 4290 requires the California Board of Forestry and Fire Protection to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within SRAs and lands within Very High Fire Hazard Severity Zones (VHFHSZ) of LRAs.

Government Code 51177: Very High Fire Hazard Severity Zones

VHFHSZs are defined by Government Code Section 51177 as areas designated by the Director of Forestry and Fire Protection as having the highest possibility of having wildfires. These zones are based on consistent statewide criteria and the severity of fire hazard that is expected to prevail in those areas. The zones are also based on fuel loading, slope, fire weather, and other factors, such as wind, that have been identified by CAL FIRE as a major cause of the spreading of wildfires. FHSZ maps are produced and maintained for each county.

Senate Bill 1241 (Statutes of 2012, Kehoe)

Senate Bill 1241 revised the safety element requirements for counties and cities with State Responsibility Areas and/or VHFHSZs with LRAs within their boundaries. The bill requires that any revisions of a general plan's housing element after January 2014 must also include the revision and updating of the safety element, as necessary, to address the risk of fire in SRAs and VHFHSZs with LRAs.

2018 California Strategic Fire Plan

The Board of Forestry and Fire Protection’s Strategic Fire Plan provides an overall vision for a built and natural environment that is more fire resilient through coordination and partnerships of local, State, federal, tribal, and private entities. First developed in the 1930s, the Strategic Fire Plan is periodically updated; the current plan was prepared in 2018. The Plan analyzes and addresses the effects of climate change, overly dense forests, prolonged drought, tree mortality, and increased severity of wildland fires through goals and strategies. The primary goals of the 2018 Strategic Fire Plan are to do the following.

- Improve the availability and use of consistent, shared information on hazard and risk assessment.
- Promote the role of local planning processes, including general plans, new development, and existing developments, and recognize individual landowner/homeowner responsibilities.
- Foster a shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans.
- Increase awareness and actions to improve fire resistance of man-made assets at risk and fire resilience of wildland environments through natural resource management.
- Integrate implementation of fire and vegetative fuels management practices consistent with the priorities of landowners or managers.
- Determine and seek the needed level of resources for fire prevention, natural resource management, fire suppression and related services.
- Implement needed assessments and actions for post-fire protection and recovery.

Regional Regulations

2023 Strategic Fire Plan – CAL FIRE Amador-El Dorado Unit

El Dorado County is located within the jurisdiction of CAL FIRE’s Amador-El Dorado Unit (AEU). The goal of the AEU is to reduce the loss of life, property, watershed values, and other assets at risk from wildfire through a focused pre-fire management program and increased initial attack success. The purpose of the 2023 Strategic Fire Plan is to provide effective direction to departmental staff and communities within the Administrative Unit to direct resources and personnel commitments towards the implementation of this Strategic Fire Plan (CAL FIRE 2024a).

Tahoe Regional Planning Agency

The eastern portion of El Dorado County is located within the Lake Tahoe Basin, a unique and scenic natural and recreational resource. Because of Lake Tahoe’s importance as a State and national resource, its environmental sensitivity, and the need for a region-wide approach to address environmental threats to the lake, the Lake Tahoe Basin is subject to regulatory framework governed by the Tahoe Regional Planning Compact (Compact). The Compact, adopted by statute by California, Nevada, and the federal

government, created the Tahoe Regional Planning Agency (TRPA), a bi-state agency that has land use authority within the basin.

TRPA Code of Ordinances

The TRPA Code of Ordinances is a compilation of all TRPA laws and ordinances established to implement the goals and policies of the Regional Plan (TRPA 2024a). The following chapters of the TRPA Code of Ordinances apply to the Project:

Chapter 35, *Natural Hazard Standards*, sets forth regulations pertaining to recognition of natural hazards, prevention of damage to property, and protection of public health relating to such natural hazards. It implements provisions of the Goals and Policies and the Water Quality Management Plan for the Lake Tahoe Region pertaining to avalanche and mass instability, floodplains, and wildfire.

Chapter 61, *Vegetation and Forest Health*, regulates the management of forest resources to achieve and maintain the environmental threshold standards for species and structural diversity, to promote the long-term health of natural resources, to restore and maintain suitable habitats for native wildlife species, and to reduce accumulations of hazardous fuels in order to decrease the likelihood of catastrophic wildfire events.

TRPA Regional Plan

Wildfire is addressed within the Natural Hazards Subelement of the *Land Use Element* and the Vegetation Subelement of the *Conservation Element* of the TRPA Regional Plan (TRPA 2024b).

The Natural Hazards Subelement contains the following goal and policies that apply to the Project:

- **Goal NH-1:** Risks from natural hazards (e.g., flood, fire, avalanche, earthquake, seiche) will be minimized. Land uses within the Tahoe Region should be planned with recognition of natural hazards so as to help prevent damage to property and to protect public health. Natural hazard areas or situations can be identified, and precautionary measures taken to minimize impacts.
 - **Policy NH-1.2:** Prohibit additional development, grading, and filling of lands within the 100-year flood plain and in the area of wave run-up except for public recreation facilities, public service facilities, necessary crossings, restoration facilities, and as otherwise necessary to implement the goals and policies of the Pla. Require all facilities located in the 100-year flood plain and area of wave run-up to be constructed and maintained to minimize impacts on the flood plain. The Tahoe Region is often subject to rain or storm events which cause extreme fluctuations in stream flows or wave run-up which can result in flooding and damage to property. Grading, filling, and structural development within the flood plain causes alteration of the stream flow and may accentuate downstream flooding.
 - **Policy NH-1.3:** Inform residents and visitors of the wildfire hazard associated with occupancy in the Region. Encourage use of fire-resistant materials and fire preventative techniques when constructing structures, especially in the highest fire hazard areas. Manage forest fuels to be consistent with state laws and other goals and policies of this plan. Most wildfires in the Lake Tahoe Region are human-caused. The decadent and monoculture vegetation on steep slopes is highly susceptible to wildfires. Serious

environmental damage, property damage and impacts to public health can result from wildfires. Public awareness and education can help to decrease the risk of human-caused wildfires. Programs involving the manipulation of vegetation can also reduce fire hazards. The potential for damage to structures can be minimized with various construction techniques and installation of fire-resistant materials. The Agency, in cooperation with fire protection agencies, will set forth criteria describing areas of high hazard and will also propose fire prevention techniques and measures.

The Vegetation Subelement contains the following goals and policy that apply to the Project:

- **Goal VEG-1:** Provide for a wide mix and increased diversity of plant communities in the Tahoe Region. The natural succession of vegetation in the Region has been stifled over the past 130 years. Following clear cut activities in the late 1800s, the forest vegetation has been managed under wildfire exclusion policies. The resulting lack of naturally occurring fires and other natural perturbations has created an unnatural forest structure with regard to forest health and diversity. Extensive and overstocked stands of second growth conifers now dominate the forest vegetation. Other plant communities that require openings in the forest canopy are relatively scarce. The resulting situation is one of low plant diversity, poor age class structure, vulnerability to disease and pest organisms and increased risk of catastrophic wildfire. The preservation of the Region's vegetation and the achievement of environmental thresholds require programs that preserve or protect certain plant communities and species while permitting increased opportunities to manage the vegetation for diversity, fire prevention, and health. Attainment of these thresholds requires an on-going program involving harvest of fire fuels, revegetation, and vegetation manipulation.
 - **Policy VEG-1.1:** Forest management practices shall be allowed when consistent with acceptable strategies for the maintenance and enhancement of forest health and diversity, prevention of wildfire, protection of water quality, and enhancement of wildlife habitats. Forest management practices that may include both timber harvest and prescribed burning are acceptable strategies for restoring and maintaining the biological health of the forest ecosystem. This policy would also permit practices necessary to reduce the risk of catastrophic wildfires.
 - **Policy VEG-1.11:** Encourage local governments to develop urban forestry components within their area plans. urban forestry programs should seek to reestablish natural forest conditions in a manner that does not increase the risk of catastrophic wildfire.
- **Goal VEG-6:** TRPA shall work with fire protection agencies in the region to reduce the risk of catastrophic wildfire. The prevention of catastrophic wildfire requires active forest management and coordination with fire protection agencies in the Region.
 - **Policy VEG 6.1:** Promote hazardous fuels reduction in order to reduce the intensity of naturally occurring wildfire and prevent catastrophic wildfire.
 - **Policy VEG-6.2:** Promote creation of defensible space using forest management practices that are consistent with state defensible space codes and community wildfire protection plans.

Local Regulations

El Dorado County Office of Emergency Services

The County's Office of Emergency Services (OES) is managed by the County Sheriff's Office and coordinates overall response through the Emergency Operations Center (EOC). In addition to State coordination, OES collaborates with the County's fire districts, emergency medical services agency, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills. OES updates and maintains local emergency response plans, provides Countywide training and exercises to the County, offers active violence training to County agencies and schools, maintains and exercises the emergency notification systems, and provides public education and information on preparing for disasters. In 1994, the County Board of Supervisors designated the Sheriff's Office the responsibility for managing the County's OES. Sheriff's Office employees assigned to the OES work in collaboration with Fire services, Emergency Medical Services, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills (County 2003; County 2024a).

The County OES provides emergency alerts through the El Dorado County Emergency Alerts powered by Rave. The County OES recently implemented Perimeter Platform to improve emergency operations and communication channels with the public during critical situations. Although the Perimeter Platform is not an alerting platform, it provides vital information for residents during crises, particularly wildfires (County 2024a).

El Dorado County Emergency Operations Plan

The El Dorado County Emergency Operations Plan (EOP) serves as the official emergency plan document in the County. The EOP was revised in 2023 to bring it into compliance with the California Emergency Services Act, the Standardized Emergency Management System (SEMS), and the federal National Incident Management System (NIMS). The EOP is the principal guide for the agencies of El Dorado County and other local government entities to prevent, prepare, respond, and recover from emergencies disasters affecting El Dorado County. Secondly, this plan is intended to facilitate multi-agency and multi-jurisdictional coordination, particularly between local, State, and federal agencies in emergency operations (County 2024a).

El Dorado County Office of Wildfire Preparedness and Resilience

The El Dorado County Office of Wildfire Preparedness and Resilience (OWPR) was established by the County Board of Supervisors in 2022 to coordinate the planning and implementation of wildfire mitigation activities across the County. OWPR prepared the El Dorado County El Dorado Wildfire Strategy, a comprehensive wildfire prevention and preparedness strategy for El Dorado County that fosters the creation, coordination and maintenance of fire adapted communities and is in alignment with federal, State, and local policies, plans and initiatives.

El Dorado County Multi-Jurisdictional Hazard Mitigation Plan

El Dorado County is preparing a Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) update to the 2019 El Dorado County Local Hazard Mitigation Plan (LHMP) approved by FEMA. The Draft MJHMP was released in 2024. The purpose of the MJHMP update is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. Four jurisdictions also

participated in the County MJHMP through supplemental annexes to the document, including: the City of Placerville, Cameron Park Community Services District, El Dorado County Office of Education, and Georgetown Divide Public Utility District. The MJHMP was developed to ensure El Dorado County and participating jurisdictions' continued eligibility for certain federal disaster assistance: specifically, the FEMA Hazard Mitigation Grant Program, the Building Resilient Infrastructure and Communities Grant Program, and the Flood Mitigation Assistance Grant Program.

The MJHMP was prepared consistent with the Health and Safety Element (Safety Element) of the County General Plan, as the planning effort covers common overlapping natural hazard issues and mutually reinforcing policies and implementation programs. The MJHMP and Safety Element are considered complimentary documents that address natural hazards, and both planning documents contain goals and project actions or implementation programs to enhance the County's mitigation efforts related to public safety. California Government Code Section 65302.10, also referred to as Assembly Bill (AB) 2140 encourages California counties and cities to adopt their current, FEMA-approved LHMPs into the Safety Element of their General Plan (County 2024b).

El Dorado County Code

Chapter 8.08, *Fire Hazard Ordinance*, requires defensible space as described by the PRC, including the incorporation and maintenance of a 30-foot fire break or clearing around structures. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law. The *Fire Hazard Ordinance* also establishes limits on campfires, fireworks, smoking, and incinerators. The ordinance is applicable to all developments in the County, including all discretionary and ministerial developments.

Chapter 8.09, *Hazardous Vegetation and Defensible Space Ordinance*, provides for the removal of hazardous vegetation and combustible materials situated in the unincorporated areas of the County so as to reduce the potential for fire and to promote the safety and welfare of the community. This ordinance applies to the abatement of the growth and/or accumulation of weeds, grasses, shrubs, dormant brush, slash, tree limbs, hazardous vegetation and combustible materials on all Improved Parcels and designated Unimproved Parcels within the County and maintenance of those parcels to prevent vegetation from growing back.

Chapter 110.14, *Grading, Erosion, and Sediment Control*, regulates grading within the unincorporated areas of El Dorado County in order to protect life, limb, health, property and public welfare; avoid pollution of watercourses; and ensure that the intended use of a graded site is consistent with the General Plan and any specific adopted plans, including the Western El Dorado County Storm Water Management Plan, State Fire Safe Standards, and relevant El Dorado County ordinances. The ordinance establishes the procedures for the issuance of grading permits, approval of plans, and inspection of construction sites. The ordinance also requires that waterways and adjacent properties be protected from erosion, flooding, or sediment deposits that could result from grading activities.

El Dorado County General Plan

Wildfire is addressed within the *Public Services and Utilities Element* and *Public Health, Safety, and Noise Element* of the County General Plan.

The *Public Services and Utilities Element* contains the following goals, objectives, policies, and implementation measure that apply to the Project (County 2015):

- **Goal 5.1: Provision of Public Services.** Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.
 - **Objective 5.1.2:** Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.
- **Goal 5.7: Emergency Services.** Adequate and comprehensive emergency services, including fire protection, law enforcement, and emergency medical services.
 - **Objective 5.7.1: Fire Protection (Community Regions).** Ensure sufficient emergency water supply, storage, and conveyance facilities are available, and that adequate access is provided for, concurrent with development.
 - **Policy 5.7.1.1:** Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.
 - **Objective 5.7.2: Fire Protection (Rural Regions and Rural Centers).** Sufficient emergency water supply, storage, and conveyance facilities for fire protection, together with adequate access are available, or are provided for, concurrent with development.
 - **Policy 5.7.2.1:** Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.
- **Implementation Measure PS-P:** Establish a working group to develop and oversee implementation of minimum Countywide standards for emergency response times, emergency access, emergency water supply and conveyance, and staffing ratios. Development of the minimum standards will not preclude emergency service providers from developing and implementing stricter standards for individual service areas. [Policies 5.7.1.1 and 5.7.2.1]

The *Public Health, Safety, and Noise Element* contains the following goals, objectives, policies, and implementation programs that apply to the Project (County 2019):

- **Goal 6.1: Coordination.** A coordinated approach to hazard and disaster response planning.
 - **Objective 6.1.1: El Dorado County Multi-Jurisdictional Local Hazard Mitigation Plan.** The El Dorado County LHMP shall serve as the implementation program for this Goal.
 - **Policy 6.1.1.1:** The El Dorado County LHMP shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County and is incorporated by reference to this Element. The County will ensure that the LHMP is updated on a regular basis to keep pace with the growing population.
- **Goal 6.2: Fire Hazards.** Minimize fire hazards and risks in both wildland and developed areas.
 - **Objective 6.2.2: Limitations to Development.** Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.
 - **Policy 6.2.2.1:** Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.
 - **Objective 6.2.4: Area-Wide Fuel Management Program.** Reduce fire hazard through cooperative fuel management activities.
 - **Policy 6.2.4.1:** Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.
 - **Policy 6.2.4.2:** The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.
- **Implementation Program HS-A:** Maintain emergency response procedures and programs, including agreements with other local, state, and federal agencies, to provide coordinated disaster response and programs to inform the public of emergency preparedness and response procedures. [Policy 6.1.1.1]
- **Implementation Program HS-B:** Work with the local Fire Safe Councils, fire protection districts, U.S. Forest Service (USFS), and CAL FIRE to develop and implement a Countywide Wildfire Safety Plan. The Wildfire Safety Plan shall focus on, but not be limited to, the following:
 - Public wildfire safety education;

- Basic fire protection standards for different areas of the County;
- Appropriate mitigation for development in areas having high and very high fuel hazards;
- Opportunities for fire fuel reduction;
- Implementation of fire safe standards;
- Coordination with fire protection districts
- Fuels management standards to apply to new development adjacent to forested areas and within greenbelts; and
- Appropriate standards for open space and greenbelts. [Policy 6.2.4.2]

Greater Placerville Wildfire Evacuation Preparedness, Community Safety, and Resiliency Study

The El Dorado County Transportation Commission (EDCTC), in collaboration with the City of Placerville, El Dorado County, the El Dorado and Georgetown Resource Conservation District, CAL FIRE and other first responders, prepared the Greater Placerville Wildfire Evacuation Preparedness, Community Safety, and Resiliency Study (Study) in June 2024 to address the study area's growing vulnerability to wildfire and identify road and other infrastructure improvements needed to help communities become fire adapted and resilient to the risk of wildfire.

The intent of this Study is to evaluate multiple wildfire scenarios, identify high-risk communities, assess the transportation network for points of catastrophic failure, engage and inform the community of these findings, and present an account of these conditions and recommendations in a wildfire evacuation preparedness study for the Greater Placerville area. The scope of this wildfire evacuation assessment is based on the behavior and movement of motor vehicles during evacuation events. This Study does not ensure that wildfires or evacuation routes will unfold precisely as depicted in this study nor does it identify any evacuation routes to be taken by the public. Evacuation orders and evacuation route designation are the purview and responsibility of the El Dorado County Sheriff's Office (EDCTC 2024).

City of Placerville Annex – El Dorado County MJHMP

While the City of Placerville Annex is not a stand-alone plan, it serves as a supplement to the hazard information provided in the County MJHMP Base Plan document. All other sections of the County MJHMP, or Base Plan, including the sections on the planning process, Countywide risk assessment, and procedural requirements related to plan implementation and maintenance apply to the City of Placerville (County 2024b).

City of Placerville City Code

Chapter 7.16, the *Hazardous Vegetation and Combustible Materials Abatement Ordinance*, sets provisions for the removal of hazardous vegetation and combustible materials situated in Placerville City limits to reduce the potential for fire and to promote the public safety and welfare of the community.

Chapter 8.7, *Grading Ordinance*, sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes the administrative procedures for issuance of permits; and provides for approval of plans and inspection of grading construction and all

grading specific to single parcel site improvements, except single-family residence construction unless exceeding prescriptive standards as defined in the City's design and improvement standards manual. Where the grading or earthwork involves multiple parcels, parcel maps, subdivisions, land divisions, or roads the design and improvement standards manual shall be used for design purposes.

City of Placerville General Plan

Wildfire is addressed within *Section VI – Health and Safety* of the City of Placerville General Plan (City of Placerville 2004). The *Health and Safety* section contains the following goals and policies that apply to the Project:

- **Goal D:** To prevent loss of lives, injuries, and property damage due to wildland and urban fires.
 - **Policy 1:** Areas of high and extreme fire hazards shall be the subject of special review, and building and higher intensity uses shall be limited unless the hazards are mitigated to a point acceptable by the Fire Department.
 - **Policy 7:** All new development shall be required to meet the minimum fire flow rates and other standards specified by the City of Placerville's Fire Code.
 - **Policy 16:** The City of Placerville shall strive to restrict vehicular access and recreational use of undeveloped foothill areas during critical fire hazard periods.
- **Goal E:** To ensure that at least the current levels of public police and fire services are maintained as new development occurs.
 - **Policy 1:** The City of Placerville shall endeavor through adequate staffing and patrol arrangements to maintain the minimum feasible police response times for emergency calls. The City of Placerville's response time goals shall be three minutes for emergency calls, seven minutes for priority calls, and ten minutes for routine calls.
 - **Policy 4:** The City of Placerville shall support the Placerville Fire District in establishing additional fire stations where needed in order to maintain maximum coverage and minimum response times throughout its service area.
 - **Policy 5:** The City of Placerville shall attempt to offset the need for new fire department staff and equipment and to improve fire safety by requiring built-in fire protection equipment in new development.

City of South Lake Tahoe Local Hazard Mitigation Plan

The City of South Lake Tahoe Local Hazard Mitigation Plan (LHMP) was updated in 2021-2022 to identify resources, information, and strategies for reducing risk from natural hazards. The LHMP update covers both natural and human-health hazards. This plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000, which allows the City of South Lake Tahoe to be eligible for FEMA's Pre-Disaster Mitigation and Hazard Mitigation Grant programs (City of South Lake Tahoe 2021).

City of South Lake Tahoe City Code

Chapter 7.20, *Grading, Erosion and Sediment Control*, is enacted for the following purposes: (1) Regulating grading on both public and private property within the City of South Lake Tahoe to safeguard life, limb, health, property and public welfare; (2) To avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff or by aerial deposition of pollutants generated from the permit area on or across the permit area; and (3) To ensure that the intended use of a graded site is consistent with the City of South Lake Tahoe general plan, any specific plans adopted thereto and applicable City of South Lake Tahoe ordinances including the zoning ordinance, flood damage prevention ordinance, environmental review ordinance and applicable chapters of the California Building Code. In the event of conflict between this chapter and state or federal law, this chapter shall prevail unless preempted by the state or federal law. In the event of conflict between this chapter and other chapters of the South Lake Tahoe City Code, this chapter shall prevail.

City of South Lake Tahoe General Plan

Wildfire is addressed within the *Public/Quasi-Public Facilities and Services Element*; *Health and Safety Element*; and *Natural and Cultural Resources Element* of the City of South Lake Tahoe General Plan (City of South Lake Tahoe 2011).

The *Public/Quasi-Public Facilities and Services Element* contains the following goal, policies, and implementation programs that apply to the Project:

- **Goal PQP-6:** To protect residents, employees, and visitors in South Lake Tahoe from injury and loss of life, and to protect property and businesses from fires.
 - **Policy PQP-6.4: Staffing Levels.** The City of South Lake Tahoe shall ensure that Fire Department staffing levels reflect enough aggregate personnel to perform the needed tasks to control the emergency and provide for life safety of the public and the responders.
 - **Policy PQP-6.6: Fire Response Times.** The City of South Lake Tahoe shall strive to maintain the following response times:
 - Still Alarms (Single Engine/Apparatus Response). The responding apparatus shall arrive within a four-minute travel time 90 percent of the time.
 - Fire Incidents (Multiple Apparatus Responses). The initial responding engine/apparatus shall arrive within a four-minute travel time 90 percent of the time, and the remaining assigned engines/apparatus shall arrive within a 10-minute travel time 90 percent of the time.
 - Emergency Medical Responses. The initial responding fire apparatus shall arrive within a four-minute travel time 90 percent of the time with advanced life support transport (i.e., Paramedic Ambulance) units arriving within a 10-minute travel time 90 percent of the time.

- **Implementation Program IMP-5.9: Fire Equipment Plan.** The City of South Lake Tahoe shall adopt and regularly update a Fire Equipment Plan to prioritize the purchase and replacement of fire equipment. [Policies PQP-6.4 and PQP-6.6]

The *Health and Safety Element* contains the following goals, policies, and implementation programs that apply to the Project:

- **Goal HS-1:** To plan for, train for, and respond to major incidences and disasters in order to minimize loss of life, major injury, and loss of property.
 - **Policy HS-1.1: Local Emergency Operations Plan Review and Update.** The City of South Lake Tahoe shall continue to periodically review and update the City's Local Emergency Operations Plan (LEOP). The City shall update the LEOP and Emergency Management Plan to include planning and response provisions for Seiche wave hazards. This would include a warning process of when area earthquake events are of 7 magnitude or greater that could generate a Seiche wave and a notification and evacuation process for residents, employees, and visitors. This may include the provision of directional signage to guide evacuees to areas outside of the Seiche wave hazard zone.
 - **Policy HS-1.4: Disaster Staging Area.** The City of South Lake Tahoe shall identify pre-planned areas throughout the City for disaster staging and evacuations. However, the City shall use the Lake Tahoe Airport, or alternate location as appropriate, as the primary disaster staging area and evacuation point for residents, employees, and visitors.
 - **Policy HS-1.7: Emergency and Disaster Preparedness Exercises.** The City of South Lake Tahoe should coordinate with local, regional, State, and Federal agencies to conduct emergency and disaster preparedness exercises in order to test operational and emergency plans.
 - **Policy HS-1.9: Local Hazard Mitigation Plan.** The City of South Lake Tahoe shall maintain and implement the Local Hazard Mitigation Plan to identify natural hazards, minimize or eliminate their effects and reduce prospective costs of reparations before any natural hazard takes place.
- **Goal HS-2:** To provide minimize fire hazards and provide fire protection services that maintain a safe and healthy community.
 - **Policy HS-2.1: Fire Resistant Construction.** The City of South Lake Tahoe shall require new, remodeled, and/or rehabilitated developments to be constructed using fire resistant materials, particularly roofing, and state-of-the-art fire prevention techniques.
 - **Policy HS-2.4: Fire Flow Adequacy.** The City of South Lake Tahoe shall require all public water providers to maintain adequate water supply systems and flows to meet fire suppression needs throughout the City.
 - **Policy HS-2.5: Fire Flow Requirements.** The City of South Lake Tahoe shall require that all new construction meets the minimum fire flow requirements as set forth in the California Building and Fire Codes.

- **Policy HS-2.6: Forest Fuel Reduction Programs.** The City of South Lake Tahoe shall improve forest health to reduce the risk of catastrophic wildfire by developing hazardous fuel reduction programs.
- **Implementation Program IMP-7.3: Forest Fuel Reduction Program.** The City of South Lake Tahoe shall adopt and regularly update a hazardous fuel reduction program to improve forest health and reduce the risk of catastrophic wildfire. The program shall include fuel reduction projects to reduce the natural build-up of fuel in the forest and the production of educational materials to educate homeowners and property owners on ways to mitigate wildfire hazards. [Policy HS-2.6]
- **Implementation Program IMP-7.6: Natural Hazard Mitigation Plan.** The City of South Lake Tahoe shall regularly update the Natural Hazard Mitigation Plan to incorporate the latest WUI standards, identify natural hazards, minimize or eliminate their effects, and reduce prospective costs of reparations before any natural hazard takes place. [Policy HS-1.9]
- **Implementation Program IMP-7.7: Local Emergency Operations Plan Review.** The City of South Lake Tahoe shall continue to periodically review and update the City's LEOP. [Policy HS-1.1]
- **Implementation Program IMP-7.8: Disaster Preparedness Plan.** The City of South Lake Tahoe shall maintain and regularly update the Disaster Preparedness Plan. [Policy HS-1.7]

The *Natural and Cultural Resources Element* contains the following goal and policy that apply to the Project:

- **Goal NCR-3:** To protect, restore, and enhance biological habitats and wildlife species in South Lake Tahoe.
 - **Policy NCR-3.3: Vegetation Preservation.** The City of South Lake Tahoe shall preserve as much vegetation as possible on site and require revegetation for all proposed development as a condition of approval, so long as it does not conflict with adequate fire abatement.

4.20.1.2 Existing Conditions

Wildfires

Wildland fire is a major hazard in the State of California, particularly in the foothill areas. Wildland fires have caused major resource damage in the County, requiring large investments in burn-site rehabilitation. Wildland fires burn natural vegetation on developed and undeveloped lands and include timber, brush, woodland, and grass fires. While low-intensity wildland fires have a role in the County's ecosystem, wildland fires put human health and safety, structures (e.g., homes, schools, businesses, etc.), air quality, recreation areas, water quality, wildlife habitat and ecosystem health, and forest resources at risk (County 2003).

The long, hot, dry summers in El Dorado County, combined with poor road access, inadequate clearance between structures and vegetation, flammable vegetation, and steep topography, result in severe wildfire conditions every year. Wildland fires may be started by natural processes, primarily lightning, or by human activities, both intentionally and accidentally. Where there is human access into wildland

areas, the risk of fire increases. Typical human activities, such as smoking, debris burning, and equipment operation are the major causes of wildland fires. According to CAL FIRE, more than 90 percent of wildland fires within CAL FIRE's jurisdiction are started by people, while less than 10 percent are started by lightning. Topography is a central factor when considering the fire hazard of an area. For example, as slopes increase, fires spread faster. In the steep and heavily vegetated ravines that are prevalent throughout the County, fire spreads rapidly and creates a "chimney effect," in which drafts of hot air and gases blow upward from ravines, resulting in sudden flashes of fire. Steep terrain also restricts accessibility to wildland fires by fire suppression crews and thus allows wildland fires to spread into additional areas (County 2003).

Most of the burned areas located on the west slope of El Dorado County have occurred on wildlands or in rural areas near wildlands. Wildland fires affect grass, forest, and brush lands, as well as any structures located within them. Where there is human access to wildland areas, such as the Sierra Nevada and foothills areas, the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Wildfires have the potential to occur in all areas of El Dorado County, including the more populated areas of El Dorado Hills, Cameron Park/Shingle Springs, Placerville, Camino/Pollock Pines and South Lake Tahoe. El Dorado National Forest also covers approximately 460,000 acres and is also vulnerable to wildfire (County 2024b).

Preventive measures are designed to minimize the occurrence of and damage caused by wildland fires. As natural causes of wildland fires (primarily lightning) cannot be controlled, the emphasis is placed on prohibiting and minimizing human activities that directly cause wildland fires. Despite legal prohibitions, many wildland fires start unintentionally as a result of automobile traffic, equipment use, smoking, and outdoor recreation activities. In order to minimize the fire-causing potential of legal activities, federal, State, and local agencies have implemented a variety of measures, including education, signage, patrol, and enforcement (County 2003).

Wildfire Hazard Zones

Public Resources Code 4201-4204 directs CAL FIRE to map fire hazard within State Responsibility Areas (SRA) based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These zones, referred to as Fire Hazard Severity Zones, classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone. According to the CAL FIRE Fire Hazard Severity Zone Map for El Dorado County, 419,622 acres are Very High; 109,327 acres are High; and 19,582 acres are Moderate (CAL FIRE 2024b). See Figure 4-20.1, *State Responsibility Area Fire Hazard Severity Zones*, for a map of fire hazard severity zones in the County.

Fire Protection

The western slope of the County receives fire protection services from nine local fire protection districts. The Lake Tahoe Basin receives services from four fire protection districts including the South Lake Tahoe Fire District. The fire protection districts that serve rural areas are primarily staffed by volunteer fire fighters. There are mutual aid agreements between most of the agencies to ensure that adequate manpower and equipment can be provided when a fire occurs. The local fire protection districts are responsible for structural fire and wildland fire. Response times for the local fire protection districts can be more than 20 minutes in rugged mountain areas.

CAL FIRE's AEU is responsible for providing fire protection services to 548,531 acres of SRA land in the County. In fulfillment of the mutual aid agreement with the local fire districts and USFS, CAL FIRE also responds to and abates uncontrolled fire that threatens to destroy life, property, or natural resources outside the SRA. CAL FIRE operates five State-owned fire stations near the communities of Camino, El Dorado, Pilot Hill, Garden Valley, and River Pines.

USFS is responsible for fire prevention and suppression of FRA lands in the County, including the Eldorado National Forest and privately owned lands within the boundaries of the forest. USFS also provides mutual aid to CAL FIRE. USFS uses a variety of fire management techniques, including fuel loading management, fire hazard clearance from structures, and control of high-risk human activities (County 2003).

For further information on fire protection services in El Dorado County, see Section 4.15, *Public Services*, of this program EIR.

Evacuation Routes/Emergency Response Plans

Evacuation of an endangered area is a priority during an emergency or disaster. Each incident is unique and requires rapid evaluation by all involved agencies to determine the best evacuation route given the type of emergency. El Dorado County does not currently have a static emergency evacuation plan. However, in the event of a disaster or large-scale incident, the County OES coordinates the overall response through the EOC. In the event of an emergency, El Dorado County Sheriff's Office is the responsible entity for declaring and directing evacuations in the case of emergencies (County 2024a). When activated, the EOC provides a central location for responding and supporting agencies to collaborate response and recovery efforts, allowing for effective and efficient information dissemination and resource deployment.

The County's OES, which is managed by the County Sheriff's Office, collaborates with the County's fire districts, emergency medical services agency, hospitals, schools, and public and private agencies to prepare, update, and implement the County's EOP, which includes emergency response plans for flood and dam failure events. The County's OES also maintains emergency plans for dams that are prepared by utility companies (County 2003).

The City of South Lake Tahoe is responsible for emergency operations within the City's limits. In accordance with the California Office of Emergency Service's SEMS program, the City of South Lake Tahoe prepared an Emergency Management Plan in 2008 that is in compliance with OES standards (City of South Lake Tahoe 2010).

4.20.2 Significance Thresholds

The CEQA guidelines require that impacts related to wildfire be evaluated for lands in or near SRAs or areas classified as FHSZs. According to Appendix G of the CEQA Guidelines, the proposed Project may have a significant impact related to wildfire if the Project would:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;

3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and
4. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

4.20.3 Impact Analysis

FIRE-1 The proposed project may impair an adopted emergency response plan or emergency evacuation plan.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on utility pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public rights-of-way (ROW). Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements.

Information on evacuation routes and emergency response plans in the County is contained in the County MJHMP and City of South Lake Tahoe LHMP. Additionally, the County EOP provides information on emergency procedures, including preparedness, response, mitigation, and recovery. As previously noted, the City of Placerville does not have an adopted LHMP and instead has an annex that supplements the County MJHMP. In the event of an emergency, the El Dorado County Sheriff's Office is the responsible entity for declaring and directing evacuations in the case of emergencies. The County OES provides emergency alerts through the El Dorado County Emergency Alerts powered by Rave. The County OES recently implemented the Perimeter Platform to improve emergency operations and communication channels with the public during critical situations. Although the Perimeter Platform is not an alerting platform, it provides vital information for residents during crises, particularly wildfires (County 2024a).

Construction

Construction of individual fiber projects may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services. Coordination with local agencies (e.g., CHP, Caltrans, and local police and fire departments) for any necessary and temporary road closures would be required, especially for construction within designated emergency access routes or in areas that would impede or otherwise affect evacuation and emergency access or services. As discussed in Section 4.9, *Hazards and Hazardous Materials*, and Section 4.17, *Transportation*, to minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1 below. Depending on the location of individual fiber projects, an Encroachment Permit application would be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3 for review and approval. Any construction on Bureau of Land Management (BLM) land would require the ROW acquisition, and any construction on U.S. Forest Service (USFS) land would

require a construction easement. Any construction on private land would require applicable building permits. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required for all construction activities along ROW, and would be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits. With implementation of Mitigation Measure TRA-1, which requires preparation of a Traffic Control and Detour Plan, potentially significant impacts related to emergency response or emergency evacuation plans from construction of individual fiber projects along ROW would be reduced to less than significant.

Operation

Operational activities for any individual fiber projects implemented under the Project would be limited to routine maintenance and emergencies. Infrastructure such as circuit cabinets with cooling fans and/or stand-by generators associated with individual fiber projects may be routinely checked, as needed.

Impact Conclusion

Implementation of the proposed Project would introduce a wider and more reliable network throughout the County. The proposed Project would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. The Project may also increase individuals' access to telehealth throughout the County, which could reduce the need for medical emergency response vehicles and demand for emergency response services. Therefore, with implementation of Mitigation Measure TRA-1, which requires preparation of a Traffic Control and Detour Plan, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan, and the impact would be less than significant.

Significance without Mitigation: Potentially significant impact.

Mitigation Measure TRA-1: Traffic Control and Detour Plan

Prior to the issuance of an encroachment permit, a Traffic Control and Detour Plan shall be developed for individual fiber projects that would require an encroachment permit for construction activities along ROW to manage traffic during construction. The applicant shall consult with the Lead Agency and/or Caltrans prior to initiation of construction activities that may affect area traffic (such as construction staging necessitating lane closure, trenching, etc.) to ensure that the Traffic Control and Detour Plan is prepared in conformance with applicable code and ordinance requirements for emergency access. The construction contractor shall implement appropriate traffic controls identified in the Traffic Control and Detour Plan in accordance with the California Vehicle Code and other State and local requirements to avoid or minimize impacts on traffic during construction. The Traffic Control and Detour Plan shall be submitted to the agency responsible for issuing the encroachment permit for review and approval prior to the commencement of construction activities.

Significance with Mitigation: Less than significant impact.

FIRE-2 Due to slope, prevailing winds, and other factors, the project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on utility pole lines, or in a combination of both. As the proposed Project is an infrastructure improvement project, there would be no project occupants that would be exposed to wildfire risks. However, individual fiber projects may pass through existing communities and cities within the County. The area in which future broadband infrastructure could be implemented includes the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, and Caltrans' public ROW. Broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. The exact alignment of future broadband infrastructure is currently unknown at this time and would be planned based on construction feasibility, local preference, and locations of sensitive environmental resources.

The proposed broadband infrastructure could be constructed in areas in the County characterized by moderate to steep slopes. However, as fiber optic lines and/or utility poles would be located primarily along ROW, the risk of localized ground failure is assumed to have already been minimized through previous grading, compaction, and use of engineered fills. Design and construction of individual fiber projects would be conducted in accordance with the CBC and other applicable engineering specifications and grading regulations that would further reduce the potential landslide risk in post-fire conditions. Additionally, prior to construction of individual fiber projects, preparation of a preliminary soils/geotechnical report would be required as part of the grading permit application process. All grading activities would comply with the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*.

Numerous ordinances are implemented by the TRPA, the County, and the incorporated cities of Placerville and South Lake Tahoe to decrease the wildfire hazards in El Dorado County. Adherence to the CBC Chapter 7A, *Fire Hazard Severity Zones and Building Standards and Materials*, and Public Resource Code 4291, requires property owners to maintain clearance of flammable vegetation of 100 feet from structures in order to reduce the risk of fire. The County MJHMP and City of South Lake LHMP also identify critical facilities and infrastructure that include emergency operations centers and evacuation shelters. These critical facilities would provide emergency support to residents during potential wildfire events. Therefore, the proposed Project would not exacerbate wildfire risks due to slope, prevailing winds, or other factors. The impact would be less than significant.

Significance without Mitigation: Less than significant impact.

FIRE-3 The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Construction

The proposed Project would allow for the installation of broadband infrastructure in areas of Moderate, High, and Very High FHSZ within the County (CAL FIRE 2024b). The primary potential fire hazards from construction of broadband infrastructure would involve construction vehicles and equipment that could

ignite dry vegetation and cause a fire, particularly during the drier, warmer months from June to October.

Construction activities that could result in sparks, such as welding or grinding, have a greater likelihood of creating a source of ignition than other construction-related activities. Numerous ordinances are implemented by the TRPA, the County, and the incorporated cities of Placerville and South Lake Tahoe to decrease the wildfire hazards in El Dorado County. Adherence to the CBC Chapter 7A, *Fire Hazard Severity Zones and Building Standards and Materials*, and Public Resource Code 4291, requires property owners to maintain clearance of flammable vegetation of 100 feet from structures in order to reduce the risk of fire. The County MJHMP and City of South Lake LHMP also identify critical facilities and infrastructure that include emergency operations centers and evacuation shelters. These critical facilities would provide emergency support to residents during potential wildfire events. Additionally, construction workers would be trained in basic firefighting, and the availability of tools and training would allow construction crews to help control or extinguish fires they may come upon. Therefore, adherence to existing regulations would ensure that impacts related to fire risks from construction would be less than significant.

Operation

The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. The majority of future broadband infrastructure would be constructed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or Caltrans' public ROW. Buried conduits would not exacerbate fire risk as all infrastructure would be located underground. Overhead fiber optic lines would be attached to proposed or existing pole lines. The proposed poles would adhere to CBC Chapter 7A, *Fire Hazard Severity Zones and Building Standards and Materials*, and Public Resource Code 4291, which require property owners to maintain clearance of flammable vegetation of 100 feet from structures in order to reduce the risk of fire. However, fiber optic lines do not carry an electrical charge and are therefore not a source of heat (Fluke Networks 2022). Therefore, underground, or aboveground fiber optic lines would not exacerbate fire risk. Impacts related to fire risks from operational activities would be less than significant.

Impact Conclusion

Construction activities that could result in sparks, such as welding or grinding, have a greater likelihood of creating a source of ignition than other construction-related activities. However, the proposed Project would follow the County MJHMP, and City of South Lake Tahoe LHMP, and would adhere to CBC requirements. The proposed Project would allow for individual fiber projects to install fiber optic conduit either underground in buried conduits, overhead on pole lines, or in a combination of both. However, fiber optic lines do not carry an electrical charge and are therefore not a source of heat (Fluke Networks 2022). Therefore, underground, or aboveground fiber optic lines would not exacerbate fire risk. Impacts related to fire risks from construction and operational activities would be less than significant.

Significance without Mitigation: Less than significant impact.

FIRE-4 The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The proposed Project would not result in an increase in population, nor would the Project include the construction of residential or commercial structures. However, individual fiber projects may pass through unincorporated communities in the County and the cities of Placerville and South Lake Tahoe. The proposed broadband infrastructure could be constructed on areas characterized by moderate to steep slopes. However, as discussed in Impact FIRE-2, design and construction of individual fiber projects would be conducted in accordance with the CBC and other applicable engineering specifications and grading regulations that would further reduce the potential landslide risk in post-fire conditions. Additionally, prior to construction of individual fiber projects, preparation of a preliminary soils/geotechnical report would be required as part of the grading permit application process. All grading activities would comply with the *El Dorado County Grading, Erosion, and Sediment Control Ordinance*.

As outlined in Section 4.10, *Hydrology and Water Quality*, individual fiber projects would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) for erosion control, which would reduce the potential flooding risk in post-fire conditions. Therefore, the potential for the proposed Project to exacerbate the risk of downstream flooding or landslides would be less than significant.

Significance without Mitigation: Less than significant impact.

4.20.4 Cumulative Impacts

FIRE-5 The proposed project would be located in a State Responsibility Area and may contribute to a significant cumulative impact with respect to wildfire.

The areas considered for cumulative impacts related to wildfire are the SRAs, which include the Project area and other cumulative projects or plans/projections. As discussed above under FIRE-1 through FIRE-4, implementation of the proposed Project would result in a less than significant impact related to wildfires with implementation of Mitigation Measure TRA-1.

The analysis of cumulative impacts is based on impacts of the proposed Project and the other cumulative projects in the County. As shown in Table 4-1, El Dorado County Cumulative Projects List, in Chapter 4.0, Environmental Impact Analysis, numerous transportation projects are planned or programmed in El Dorado County, including various road maintenance and rehabilitation, road system management and operations, and bike and pedestrian infrastructure improvement projects. The vast majority of these cumulative transportation projects involve existing transportation infrastructure, as such, construction activities may require temporary lane closures, which have the potential to impede or interfere with emergency access routes or services.

To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project would be required to develop and implement a Traffic Control and Detour Plan consistent with an Encroachment Permit and code requirements of El Dorado County. Standard traffic control measures, specified in a Traffic Control and Detour Plan, would be required to be employed for all construction activities along ROW, and would

be subject to review and approval by the applicable local, State, or federal agencies for work within their respective limits. With implementation of Mitigation Measure TRA-1, which requires preparation of a Traffic Control and Detour Plan, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan.

Implementation of the proposed Project and the cumulative projects could potentially involve construction in areas that are prone to wildland fires which could result in significant loss, damage, or death. Adherence to the CBC Chapter 7A, *Fire Hazard Severity Zones and Building Standards and Materials*, and Public Resource Code 4291, requiring property owners to maintain clearance of flammable vegetation of 100 feet from structures, would also reduce the risk of fire. The County MJHMP and City of South Lake Tahoe LHMP also identify critical facilities and infrastructure that include emergency operations centers and evacuation shelters. These critical facilities would provide emergency support to residents during potential wildfire events. Additionally, fiber optic lines do not carry an electrical charge and are therefore not a source of heat that could exacerbate fire risk. The proposed Project and the cumulative projects would follow the County MJHMP, and City of South Lake Tahoe LHMP, and would adhere to CBC requirements. Therefore, with implementation of Mitigation Measure TRA-1, which requires preparation of a Traffic Control and Detour Plan, the impact would be less than cumulatively considerable.

Significance without Mitigation: Potentially significant impact.

See Impact FIRE-1 for Mitigation Measure TRA-1.

Significance with Mitigation: Less than significant impact.

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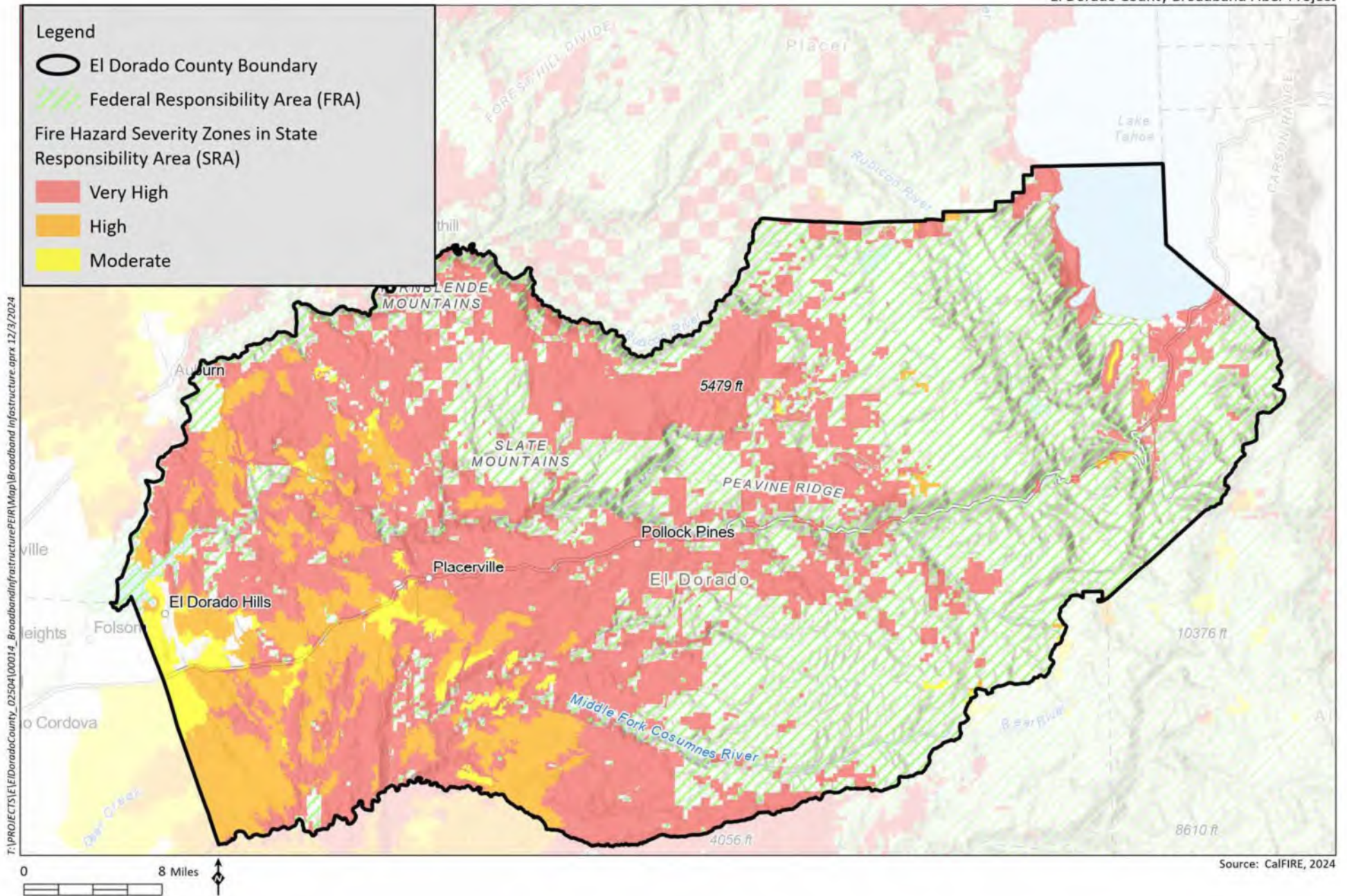
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5.0 PROJECT ALTERNATIVES

This section of the Environmental Impact Report (EIR) evaluates whether there may be feasible alternatives to the proposed Project that could avoid or substantially lessen any of the identified significant effects of the Project as proposed. Section 15126.6(a), Consideration and Discussion of Alternatives to the Project, of the California Environmental Quality Act (CEQA) Guidelines states that:

An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of 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. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

The following discussion is intended to inform the public and decision makers of a reasonable range of feasible alternatives to the proposed Project that would avoid or substantially lessen any significant effect of the proposed Project. This section describes the purpose of the alternative's discussion; provides a summary of the reasonable range of alternatives, including a summary of potentially significant impacts and the relationship of each alternative to the Project Objectives; and, as required, identifies the environmentally superior alternative.

5.1 RATIONALE FOR ALTERNATIVE SELECTION

Section 15126.6(c) of the CEQA Guidelines states:

The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

According to the CEQA Guidelines Section 15364, feasibility is defined as:

[The capability] of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

5.2 PROJECT OBJECTIVES AND SIGNIFICANT IMPACTS

As described in Chapter 3.0, Project Description, of this program EIR, the following objectives have been established for the proposed Project:

- Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;
- Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;
- Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;
- Streamline the environmental review process for individual fiber projects that are implemented in the County;
- Identify known environmental and cultural assets to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,
- Save time and money for both El Dorado County and broadband project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review broadband projects and avoiding duplication of applicant costs.

As described in Section 4.1 through 4.20 of this program EIR, the proposed Project would not result in any significant and unavoidable impacts.

5.3 ALTERNATIVES ANALYSIS

This program EIR analyzes four project alternatives: the No Project Alternative, Aerial Installation Only Alternative, Underground Installation Only Alternative, and Use of Existing Infrastructure Alternative, in detail to compare to the proposed Project because of their potential to reduce the potential impacts. The four alternatives are discussed in more detail in the following subsections.

5.3.1 Alternative 1: No Project Alternative

The No Project Alternative is required under Section 15126.6(e) of the CEQA Guidelines and represents a possible scenario that could occur if the proposed project is not approved. According to Section 15126.6(e)(3)(B) of the CEQA Guidelines, if the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Under the No Project Alternative, no actions would be taken to expand broadband availability in El Dorado County and the service area would remain unchanged from current conditions. As such, the No Project Alternative would not meet the Project Objectives. However, as required by CEQA, the No Project Alternative is evaluated in this program EIR. Under the No Project Alternative, there would be no discretionary action by El Dorado County, and thus no impact. However, for purposes of comparison with the other action alternatives, conclusions for each technical area are

characterized as “impacts” that are greater, similar, or reduced, to describe conditions that are worse than, similar to, or better than those of the proposed Project.

5.3.2 Alternative 2: Aerial Installation Only

The Aerial Installation Only Alternative would include only individual fiber projects that install aboveground fiber optic line that would utilize new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. This alternative was considered because it would avoid or reduce potential impacts that would be associated with underground installation of new fiber optic line or new conduit, such as construction impacts associated with horizontal directional drilling, plowing, trenching, micro trenching, line installation, and pavement repair. Some areas of the County are known to contain naturally occurring asbestos (NOA) and aerially deposited lead (ADL); the minimized ground disturbance under aerial installation methods would reduce the potential risk of exposure to hazardous materials. The aerial installation of fiber optic line would also be more feasible for long distance connections, such as in rural areas of the County.

However, the addition of new utility poles may not be feasible in some locations in the County due to the existing terrain and rocky subsurface conditions that would make it nearly impossible to reach the boring depth required for utility poles, which would leave service gaps in those locations. Further, aerial installation may not be feasible in some densely forested and mountainous areas of the County, which may prevent the aerial stringing of fiber optic line or the installation of new utility poles. Aerial fiber optic line also typically requires more frequent maintenance, as compared to underground fiber optic line or conduit. Additionally, this alternative may result in increased impacts to aesthetics and visual resources associated with the construction of new utility poles within the viewshed of scenic vistas or U.S. Highway (U.S.) 50, State Route (SR) 89, and SR 88, portions of which are designated State Scenic Highways within the County.

5.3.3 Alternative 3: Underground Installation Only

The Underground Installation Only Alternative would include individual fiber projects that would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line or new utility poles would be installed under this alternative. This alternative was considered because it would avoid or reduce potential impacts that would be associated with aboveground installation of fiber optic line, including impacts to aesthetics and visual resources associated with the construction of new utility poles within the viewsheds of scenic vistas or U.S. 50, SR 89, and SR 88, portions of which are designated State Scenic Highways within the County. Additionally, this alternative would be more feasible in certain areas of the County, such as densely forested or mountainous areas that would prevent the aerial stringing of fiber optic line or the installation of new utility poles. Lastly, the underground installation of fiber optic line typically requires less frequent maintenance due to fewer disturbances as compared to aerial fiber optic line.

However, the installation of underground fiber optic lines typically requires more ground disturbance and longer construction periods as compared to aerial installation. Increased construction-related impacts could occur due to the increased ground disturbance required for installation, including horizontal directional drilling, plowing, trenching, micro trenching, and line installation. Under this alternative, underground fiber optic lines could be constructed in areas that have existing buried utilities that could contain hazardous waste. Additionally, some areas of the County are known to contain NOA and ADL; the increased ground disturbance resulting from underground installation methods may

increase the risk of exposure to hazardous materials. Depending on the prevailing terrain and geological conditions, including bedrock near the surface, it may not be feasible to install underground infrastructure in some parts of the County.

5.3.4 Alternative 4: Use of Existing Infrastructure

The Use of Existing Infrastructure Alternative would include individual fiber projects that install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, no new utility poles or underground conduit would be installed. This alternative was considered because it would avoid or reduce most impacts associated with the proposed Project, as outlined in the program EIR, as fewer individual fiber projects would be implemented, and therefore less construction and ground disturbance. This alternative would avoid impacts to aesthetic and visual resources, because the stringing of aerial fiber optic line would occur along existing utility poles, which would not introduce new vertical features within the viewshed of scenic vistas or State Scenic Highways in the County. However, this alternative would not meet the basic Project Objectives associated with providing a reliable system of broadband communications in El Dorado County, because it would not provide for the expansion of broadband infrastructure into portions of the service area that do not already include sufficient conduit, utility poles, and supporting infrastructure.

5.3.5 Assumptions and Methodology

The following analysis compares the environmental impacts of the proposed Project alternatives with the Project-related impacts for each of the environmental topics analyzed in detail in Sections 4.1 through 4.20 of this program EIR. Table 5-1, Comparison of Project Alternatives, summarizes the impacts of each of the alternatives compared to the proposed Project.

**Table 5-1
COMPARISON OF PROJECT ALTERNATIVES**

Resource Area	No Project	Aerial Installation Only	Underground Installation Only	Use of Existing Infrastructure Only
Aesthetics	-	+	-	-
Agriculture and Forestry	-	=	=	-
Air Quality	-	-	+	-
Biological Resources	-	=	=	-
Cultural Resources	-	=	=	-
Energy	-	-	+	-
Geology and Soils	-	-	+	-
Greenhouse Gas Emissions	-	-	+	-
Hazards and Hazardous Materials	-	=	+	-
Hydrology and Water Quality	-	=	=	-
Land Use and Planning	-	=	=	-
Mineral Resources	-	=	=	-
Noise	-	=	=	-
Population and Housing	-	=	=	-
Public Services	-	+	+	+
Recreation	-	=	=	=
Transportation	-	=	=	-

Resource Area	No Project	Aerial Installation Only	Underground Installation Only	Use of Existing Infrastructure Only
Tribal Cultural Resources	-	=	=	-
Utilities and Service Systems	-	=	=	-
Wildfire	-	=	=	-

Notes:

- Reduced impact in comparison to the proposed Project.
- = Similar impact in comparison to the proposed Project.
- + Greater impact, or loss of beneficial impact, in comparison to the proposed Project.

5.4 COMPARATIVE IMPACT ANALYSIS

5.4.1 No Project Alternative

Under the No Project Alternative, no actions would be taken to expand broadband availability within El Dorado County and the service area would remain unchanged from current conditions. The following subsections compare the environmental impacts of the No Project Alternative with the proposed Project-related impacts for each of the environmental topics analyzed in detail in Section 4.1 through 4.20 of this program EIR.

5.4.1.1 Aesthetics

Under the No Project Alternative, no construction would occur, and no new broadband infrastructure would be installed. Because there would be no visible changes in the service area, there would be no effects on scenic vistas, no damage to scenic resources adjacent to a designated State Scenic Highway, no degradation of scenic character or views, and no conflict with scenic or visual resource regulations. There would be no impact on aesthetics. *(No Impact)*

5.4.1.2 Agriculture and Forestry

Under the No Project Alternative, no construction, excavation, or ground disturbance would occur. Because no changes would occur, the No Project Alternative would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses, nor would it conflict with existing zoning for agricultural use or conflict with a Williamson Act contract. The No Project Alternative would not conflict with existing zoning for or cause rezoning of forest land, timberland, or timberland zoned Timberland Production, nor would it result in the loss of forest land or conservation of forest land to non-forest use. Lastly, the No Project Alternative would not cause other changes in the existing environment that, due to their location or nature, would result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. For these reasons, the No Project Alternative would have no impact on agricultural and forestry resources. *(No Impact)*

5.4.1.3 Air Quality

Under the No Project Alternative, the proposed broadband infrastructure would not be constructed. Because no construction would occur and the service area would remain unchanged, there would be no effects on air quality. The No Project Alternative would not conflict with applicable air quality plans, would not increase any criteria pollutant for which the project region is non-attainment, would not expose sensitive receptors to substantial pollutant concentrations, and would not result in substantial

emissions of odors adversely affecting a substantial number of people. For these reasons, the No Project Alternative would have no impact on air quality. *(No Impact)*

5.4.1.4 Biological Resources

Because no construction, excavation, or ground disturbance would occur under the No Project Alternative, there would be no effects on biological resources. The No Project Alternative would not affect special-status species or habitat, or riparian habitat or other sensitive natural communities. Nor would it degrade wetlands, interfere with wildlife movement corridors or nursery sites, or conflict with local ordinances or policies. For these reasons, the No Project Alternative would have no impact on biological resources. *(No Impact)*

5.4.1.5 Cultural Resources

No construction, excavation, or ground disturbance would occur under the No Project Alternative. Therefore, there would be no effects on historic resources, unique archeological resources, or tribal cultural resources. Because no construction would occur under the No Project Alternative, there would also be no risk of disturbing human remains. For these reasons, the No Project Alternative would have no impact on archeological and historical resources. *(No Impact)*

5.4.1.6 Energy

The No Project Alternative would not affect energy because it would not result in the construction or operation of new broadband infrastructure. The No Project Alternative would not result in impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation, nor would it conflict or obstruct a State or local plan for renewable energy or energy efficiency. For these reasons, the No Project Alternative would have no impact on energy. *(No Impact)*

5.4.1.7 Geology and Soils

With the No Project Alternative, no construction, excavation, or ground disturbance would occur. Because no changes would occur, the No Project Alternative would not expose people or structures to adverse seismic impacts, result in substantial erosion or loss of topsoil, or expose infrastructure to or cause geologic hazards. Similarly, this alternative would not result in the loss of a unique paleontological resource or geologic feature. For these reasons, the No Project Alternative would have no impact on geology and soils. *(No Impact)*

5.4.1.8 Greenhouse Gases Emissions

Under the No Project Alternative, no construction or operation of additional broadband infrastructure would occur. As a result, there would be no construction related greenhouse gas (GHG) emissions, and no GHG emissions would occur from operating new broadband infrastructure. Thus, there would be no impact on greenhouse gas emissions and climate change. *(No Impact)*

5.4.1.9 Hazards and Hazardous Materials

No construction would occur, and no new broadband infrastructure would be installed under the No Project Alternative. Because there would be no construction or operation of new broadband infrastructure, there would be no risk of exposure to hazards from the routine transport, use, or disposal

of hazardous materials. Similarly, there would be no risk of upset or accident conditions or development on a hazardous waste site, and no risk of emitting or handling hazardous materials near a school. The No Project Alternative would also not result in hazards due to construction near an airport, conflict with an emergency response or evacuation plan, or increase wildfire risk or exposure to wildfire. For these reasons, there would be no impact associated with hazards and hazardous materials. *(No Impact)*

5.4.1.10 Hydrology and Water Quality

Because no construction, excavation, or ground disturbance would occur under the No Project Alternative, the alternative would not affect hydrology and water quality. With no construction activities or new infrastructure, the No Project Alternative would not violate any water quality standards or degrade surface or groundwater quality, nor would it affect groundwater supply or result in substantial erosion, flooding, or runoff. The No Project Alternative would also not change the existing risk of the release of pollutants due to inundation for seiche or flood. Therefore, the No Project Alternative would have no impact on hydrology and water quality. *(No Impact)*

5.4.1.11 Land Use and Planning

The No Project Alternative would not affect land use and planning because it would not result in the construction or operation of new broadband infrastructure. The No Project Alternative would not physically divide an established community, nor would it cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. For these reasons, the No Project Alternative would have no impact on land use and planning. *(No Impact)*

5.4.1.12 Mineral Resources

With the No Project Alternative, no construction, excavation, or ground disturbance would occur. Because no changes would occur, the No Project Alternative would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or result in the loss of availability of a locally important mineral resource recovery site. Therefore, the No Project Alternative would have no impact on mineral resources. *(No Impact)*

5.4.1.13 Noise

Under the No Project Alternative, no construction or operation of additional broadband infrastructure would occur. As a result, there would be no construction or operational noise. Thus, there would be no impact related to noise. *(No Impact)*

5.4.1.14 Population and Housing

The No Project Alternative would not affect population and housing because it would not result in the construction or operation of new broadband infrastructure that would induce unplanned population growth either directly or indirectly. Further, the No Project Alternative would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. For these reasons, the No Project Alternative would have no impact on population and housing. *(No Impact)*

5.4.1.15 Public Services

The No Project Alternative would not affect public services because it would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities. Therefore, the No Project Alternative would have no impact on public service. *(No Impact)*

5.4.1.16 Recreation

The No Project Alternative would not affect recreation because it would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Further, the No Project Alternative would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. For these reasons, the No Project Alternative would have no impact on recreation. *(No Impact)*

5.4.1.17 Transportation

The No Project Alternative would not impact transportation because it would not result in the construction or operation of new broadband infrastructure. Because there would be no construction activity or new infrastructure, the alternative would not conflict with plans, ordinances, or policies addressing the circulation system; nor would it affect vehicle miles travelled. Similarly, the No Project Alternative would not substantially increase transportation hazards or result in inadequate emergency access. For these reasons, there would be no impact on transportation and traffic. *(No Impact)*

5.4.1.18 Tribal Cultural Resources

No construction, excavation, or ground disturbance would occur under the No Project Alternative. Therefore, there would be no effects on historic resources, unique archeological resources, or tribal cultural resources. Because no construction would occur under the No Project Alternative, there would also be no risk of disturbing human remains. For these reasons, the No Project Alternative would have no impact on tribal cultural resources. *(No Impact)*

5.4.1.19 Utilities and Service Systems

The No Project Alternative would not affect utilities and service systems because it would not result in the construction or operation of new broadband infrastructure. There would be no increase to the limited existing broadband within the County. With no new infrastructure, the No Project Alternative would not impact water supplies available and wastewater treatment capacity and would not generate solid waste access that would impact solid waste reduction goals. For these reasons, there would be no impact on utilities. *(No Impact)*

5.4.1.20 Wildfire

The No Project Alternative would not affect wildfires as no construction or operation of additional broadband infrastructure would occur. With no new infrastructure, there would be no impact on an adopted emergency response plan or emergency evacuation plan. Additionally, wildfire risks would not be exacerbated, and people or structures would not be exposed to risks as a result of runoff, post-fire

slope instability, or drainage changes. For these reasons, there would be no impact on wildfire. (*No Impact*)

5.4.1.21 Conclusion and Relationship to Project Objectives

The No Project Alternative would result in fewer impacts to aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gases, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire when compared to the proposed project. Following is a discussion of the No Project Alternative's ability to attain the Project Objectives:

1. Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;

The No Project Alternative would not install any broadband infrastructure within the County and the existing conditions would remain as is. The No Project Alternative would not achieve this objective.

2. Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;

The No Project Alternative would not install any broadband infrastructure within the County and the existing conditions would remain as is. The No Project Alternative would not achieve this objective.

3. Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;

The No Project Alternative would not install any broadband infrastructure within the County and the existing conditions would remain as is. The No Project Alternative would not achieve this objective.

4. Streamline the environmental review process for individual fiber projects that are implemented in the County;

The No Project Alternative would not install any broadband infrastructure within the County and the existing conditions would remain as is. The No Project Alternative would not achieve this objective.

5. Identify known environmental and cultural assets to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,

The No Project Alternative would not install any broadband infrastructure within the County and the existing conditions would remain as is. The No Project Alternative would not achieve this objective.

6. Save time and money for both El Dorado County and broadband project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review broadband projects and avoiding duplication of applicant costs.

The No Project Alternative would not install any broadband infrastructure within the County and the existing conditions would remain as is. The No Project Alternative would not achieve this objective.

5.4.2 Aerial Installation Only Alternative

This alternative would only include individual fiber projects that install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. The following subsections compare the environmental impacts of the Aerial Installation Only Alternative with the proposed Project-related impacts for each of the environmental topics analyzed in detail in Section 4.1 through 4.20 of this program EIR.

5.4.2.1 Aesthetics

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Aesthetic impacts related to construction under this alternative would be similar to the proposed Project, as all construction activities would be temporary and short-term. Similar to the proposed Project, any lighting during construction would be minimal and downward facing to prevent light spillover and glare. However, this alternative may result in increased impacts to aesthetics and visual resources associated with the construction of new utility poles within the viewshed of scenic vistas or U.S. 50, SR 89, and SR 88, portions of which are designated State Scenic Highways within the County, as compared to the proposed Project. Under the proposed Project, individual fiber projects could install underground broadband infrastructure, which would avoid impacts to aesthetics. Similar to the proposed Project, Mitigation Measure AES-1 would be required to be implemented under this alternative to reduce potential impacts to scenic resources.

Section 4.1, *Aesthetics*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure AES-1. The Aerial Installation Only Alternative would result in slightly greater impacts as compared to the proposed Project. (*Greater Impact*)

5.4.2.2 Agriculture and Forestry Resources

Under the Aerial Installation Only alternative, individual fiber projects would only install aboveground fiberoptic line on new or existing constructed utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, this alternative would be primarily located within previously disturbed and/or developed areas, and as such, would not convert or conflict with agriculture or forestry resources.

Section 4.2, *Agriculture and Forestry Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact to agriculture and forestry resources. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.3 Air Quality

Under the Aerial Installation Only Alternative, construction activities would mainly include aerial stringing of fiber optic line and the installation of new utility poles. This alternative would require reduced ground disturbance and would avoid construction activities such as horizontal directional drilling, plowing, trenching, micro trenching, and pavement repair. Section 4.3, *Air Quality*, of this program EIR, concluded that the proposed Project would result in a less than significant construction impact would implementation of Mitigation Measures AQ-1 and AQ-2. Additionally, some areas of the County are known to contain NOA and ADL; the reduced ground disturbance impacts associated with

the Aerial Installation Only Alternative would result in reduced air quality impacts associated with exposure to pollutant concentrations. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. A backup generator may be used in the event of a power outage or for routine testing. Similar to the proposed Project, Mitigation Measures AQ-1 and AQ-2 would be required to be implemented under this alternative to reduce potential impacts to reduce potential impacts from fugitive dust and asbestos dust.

Section 4.3, *Air Quality*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure AQ-1 and AQ-2. The Aerial Installation Only Alternative would result in slightly reduced impacts on air quality as compared to the proposed Project. (*Reduced Impact*)

5.4.2.4 Biological Resources

Under the Aerial Installation Only alternative, individual fiber projects would only install aboveground fiberoptic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. This alternative Similar to the proposed Project, individual fiber projects would be required to prepare a Biological Resources Assessment (BRA), as outlined in Mitigation Measure BIO-1 to reduce impacts to a less than significant level. Additionally, if sensitive natural communities would be impacted by project implementation, the project proponent would be required to apply to the necessary permits from the U.S. Army Corps of Engineer (USACE), California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB) as outlined in Mitigation Measure BIO-2, and would be required to prepare an oak resources inventory as outlined in Mitigation Measure BIO-3. Similar to the proposed Project, if an individual fiber project would impact federally protected aquatic resources, Mitigation Measure BIO-2 would be implemented, and if it would impact the movement of wildlife species or wildlife corridors, Mitigation Measure BIO-1 would be implemented.

Section 4.4, *Biological Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures BIO-1 through BIO-3. The Aerial Installation Only Alternative would result in similar impacts on biological resources as compared to the proposed Project. (*Similar Impact*)

5.4.2.5 Cultural Resources

Under the Aerial Installation Only alternative, individual fiber projects would only install aboveground fiberoptic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Installation of new utility poles under this alternative would introduce a new visual element to areas with concentrations of historical built environment cultural resources such as buildings and structures that comprise historic districts. The use of new or existing utility poles for the collocation of fiber optic cable would change the visual signature of the poles and their vicinity. However, these collocations and new installations would be relatively minor additions to existing utility corridors in the County already populated with other utility infrastructure, including in and near historic districts and historical resources. The installation of these fiber optic lines, as proposed, would not diminish a built-environment resource's ability to convey its significance or justify the reasons for its qualification as a historical resource, two of the criteria of material impairment in the definition of a substantial adverse change in the significance of a historical resource. However, similar to the proposed

Project, individual fiber projects under this alternative could impede or destroy archaeological cultural resource's ability to convey their significance, which can embody scientific and/or traditional cultural value. Similar to the proposed Project, Mitigation Measure CUL-1 and CUL-2 would be required to be implemented under this alternative to mitigate or avoid archaeological cultural resource impact scenarios.

Section 4.4, *Cultural Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures CUL-1 and CUL-2. The Aerial Installation Only Alternative would result in similar, impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.6 Energy

Under the Aerial Installation Only Alternative, construction activities would mainly include aerial stringing of fiber optic line and the installation of new utility poles. This alternative would require less ground disturbance and would avoid construction activities such as horizontal directional drilling, plowing, trenching, micro trenching, and pavement repair, which would result in a slightly reduced impact to energy associated with construction as compared to the proposed Project. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. Further, operation of fiber optic lines themselves would not utilize energy; rather, the fiber optic lines transfer data. Similar to the proposed Project, this alternative would not conflict with or obstruct a State or local plan for renewable energy efficiency.

Section 4.6, *Energy*, of this program EIR, concluded that the proposed Project would result in a less than significant impact on energy efficiency. The Aerial Installation Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.2.7 Geology and Soils

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative, which would reduce the amount of ground disturbance as compared to the proposed Project. This alternative would reduce potential soil erosion impacts that would be associated with underground installation of new fiber optic line or new conduit, such as impacts associated with horizontal directional drilling, plowing, trenching, micro trenching, line installation, and pavement repair. As compared to the proposed Project, this alternative would have similar risks of exposing people or structures to landslides, lateral spreading, subsidence, liquefaction, soil erosion, or seismic impacts as construction would occur within County limits. However, this alternative may not be feasible in some locations in the County due to prevailing terrain and rocky subsurface conditions that would make it nearly impossible to reach the boring depth required for utility poles.

Section 4.7, *Geology and Soils*, of this program EIR concluded that the proposed Project would result in a less than significant impact on geology and soils. The Aerial Installation Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.2.8 Greenhouse Gas Emissions

Under the Aerial Installation Only Alternative, construction activities would mainly include line installation and aerial stringing. Section 4.8, *Greenhouse Gas Emissions*, of this program EIR, concluded

that the proposed Project would result in a less than significant impact to GHGs associated with construction. This alternative would require less ground disturbance activities and would avoid construction activities such as horizontal directional drilling, plowing, trenching, micro trenching, and pavement repair, therefore requiring less construction equipment and less GHGs associated with construction. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. GHG emissions are addressed within the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the Tahoe Regional Planning Agency (TRPA) Regional Plan. Similar to the proposed Project, this alternative would be consistent with the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the TRPA Regional Plan.

Section 4.8, *Greenhouse Gas Emissions*, of this program EIR concluded that the proposed Project would result in a less than significant impact to GHG emissions. The Aerial Installation Only Alternative would result in slightly reduced GHG impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.2.9 Hazards and Hazardous Materials

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. Similar to the proposed Project, small quantities of hazardous materials may be stored, used, and handled during construction activities or during routine maintenance checks, and may be located within one quarter mile of a school. Underground construction under this alternative would be limited to the installation of utility poles, this alternative would avoid impacts associated with the spillage of drilling fluid. However, this alternative would still be required to implement and comply with existing hazardous material regulations. Some areas of the County are known to contain NOA and ADL; the reduced ground disturbance associated with aerial installation methods would reduce the potential risk of exposure to hazardous materials. Additionally, as with the proposed Project, this alternative would not include utility poles over 100 feet in height or include permanent structures for human occupancy; therefore, this alternative would not interfere with airport operations or expose residents to airport-related noise. Fire risks associated with construction and operation under this alternative would require adherence to CBC Chapter 7A and Public Resources Code 4291, similar to the proposed Project; however, fiber optic lines themselves do not carry an electrical charge and would therefore not exacerbate wildland fire risk. Similar to the proposed Project, Mitigation Measure AQ-2 would be required to be implemented under this alternative to reduce potential impacts from asbestos dust and Mitigation Measure TRA-1 would be required to be implemented to manage traffic during construction.

Section 4.9, *Hazards and Hazardous Materials*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures AQ-2 and TRA-1. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.10 Hydrology and Water Quality

The Aerial Installation Only Alternative would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, if this alternative would disturb more than one acre of soil, a SWPPP with project-specific BMPs would be required for each individual fiber project. As with the proposed Project, this alternative could involve minor use of water for dust control during construction. Operation

under this alternative would require occasional maintenance needs, similar to the proposed Project; however, it is not anticipated this alternative would require additional water supplies during operation as no population would be generated.

Section 4.10, *Hydrology and Water*, of this program EIR concluded that the proposed Project would result in less than significant impacts to hydrology and water quality. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.11 Land Use and Planning

The Aerial Installation Only Alternative would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. As with the proposed Project, the installation of broadband infrastructure this alternative would not interfere with the continuation of existing aboveground uses after construction is completed and would not physically divide an established community. Prior to issuance of all applicable permits, individual fiber projects under this alternative would be required to demonstrate compliance with all applicable laws, regulations, policies, and ordinances, similar to the proposed Project. Additionally, as with the proposed Project, this alternative would not conflict with any land use plan, policy, or regulation. Under this alternative, individual fiber projects would be planned based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources, similar to the proposed Project.

Section 4.11, *Land Use and Planning*, of this program EIR concluded that the proposed Project would result in a less than significant impact to land use and planning. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.12 Mineral Resources

The Aerial Installation Only Alternative would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. This alternative would utilize new or existing utility poles located within previously disturbed and/or developed areas; as such, this alternative would not interfere with the existing mines or mineral land classification studies in El Dorado County, similar to the proposed Project.

Section 4.12, *Mineral Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact to mineral resources. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.13 Noise

The Aerial Installation Only Alternative would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, construction under this alternative would be required to limit construction hours and implement construction noise BMPs, as outlined under Mitigation Measure NOI-1. Similar to the proposed Project, the Aerial Installation Only Alternative would require emergency backup generators to be located more than 60 feet from a Noise Sensitive Land Use (NSLU) in a community area or 105 feet of a NSLU in a rural area or provide sound reduction measures to reduce noise from generators to less than 55 dBA measured at affected NSLUs, as outlined in Mitigation Measure NOI-2. Additionally, similar to the proposed Project, if construction under this alternative

would use a vibratory roller, Mitigation Measure NOI-3 would require vibratory rollers to be used in static mode only (no vibrations) in proximity to occupied buildings or fragile structures. Similar to the proposed Project, this alternative would not expose people residing or working in the Project area to excessive noise levels from public use or private airstrips.

Section 4.13, *Noise*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures NOI-1 through NOI-3. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.14 Population and Housing

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, this alternative would not directly induce population growth, as the Project would not create a substantial number of jobs, promote the construction of jobs, or remove any obstacles that currently impede growth in the County. Additionally, similar to the proposed Project, this alternative would not displace people or housing, or require the construction of replacement housing.

Section 4.14, *Population and Housing*, of this program EIR concluded that the proposed Project would result in a less than significant impact to population and housing. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.15 Public Services

The Aerial Installation Only Alternative would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, this alternative would not require the construction of housing and would not contribute to substantial unplanned population growth. Therefore, the proposed Project would not generate any additional residential population that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities. However, this alternative may not be feasible in some locations in the County due to the rocky subsurface conditions that would make it nearly impossible to reach the boring depth required for utility poles. As such, operation under this alternative would not introduce a wider or more reliable network that would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. Therefore, impacts under this alternative related to police and fire protection would be slightly greater as compared to the proposed Project.

Section 4.15, *Public Services*, of this program EIR concluded that the proposed Project would result in a less than significant impact to fire protection, police protection, and other public facilities, and no impact to schools and parks. The Aerial Installation Only Alternative would result in slightly greater impacts to fire protection and police protection as compared to the proposed Project, and similar impacts to schools, parks, and other public facilities. (*Greater Impact*)

5.4.2.16 Recreation

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, implementation of this alternative would not require the construction of housing and, therefore, would not contribute to substantial unplanned population growth. As such, the proposed Project would not generate an increased use of neighborhood or regional parks or other recreational facilities. Additionally, implementation of both the proposed Project and this alternative would not include or require the construction or expansion of recreational facilities.

Section 4.16, *Recreation*, of this program EIR concluded that the proposed Project would result in no impact to recreation. Similar to the proposed Project, no impact would occur under the Aerial Installation Only Alternative. (*Similar Impact*)

5.4.2.17 Transportation

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. To minimize or avoid lane closures that could interfere with traffic circulation during emergencies and disrupt access to private properties and roadways, each individual fiber project that would require the issuance of an encroachment permit would be required to develop and implement a Traffic Control and Detour Plan as stipulated in Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County. Depending on the location of individual fiber projects, an Encroachment Permit application would be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3. Any construction on Bureau of Land Management (BLM) land would require the ROW acquisition, and any construction on U.S. Forest Service (USFS) land would require a construction easement. Any construction on private land would require applicable building permits. Similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, as required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County.

Section 4.17, *Transportation*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure TRA-1. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.18 Tribal Cultural Resources

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, under this alternative, Mitigation Measures TCR-1 and TCR-2 would be required to be implemented to address the unanticipated discoveries of tribal cultural resources (TCRs) through Assembly Bill (AB) 52 consultation procedures.

Section 4.18, *Tribal Cultural Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure TCR-1 and TCR-2. The

Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.19 Utilities and Service Systems

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. No underground fiber optic line or new conduit would be installed under this alternative. Similar to the proposed Project, new aboveground telecommunication facilities would be installed; however, this program EIR analyzes all potential environmental impacts regarding installation of broadband infrastructure. Additionally, similar to the proposed Project, this alternative would not require relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or natural gas facilities. As with the proposed Project, this alternative could involve minor use of water for dust control during construction; however, it is not anticipated this alternative would require additional water supplies during operation as no population would be generated. Additionally, during construction, it is anticipated that portable toilets could be provided for workers, and waste would be hauled to an approved facility for treatment/disposal. As wastewater associated with portable toilets would be a temporary demand, this alternative, would not exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board (CVRWQCB) or the Lahontan Regional Water Quality Control Board (LRWQCB), similar to the proposed Project. Due to the minimal amount of solid waste generated by individual fiber projects, this alternative would not adversely affect the jurisdictions' abilities to comply with the State waste diversion requirements.

Section 4.19, *Utilities and Service Systems*, of this program EIR concluded that the proposed Project would result in less than significant impacts to utilities and service systems. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.20 Wildfire

Under the Aerial Installation Only Alternative, individual fiber projects would only install aboveground fiber optic line on new or existing utility poles. Although fiber optic lines do not carry an electrical charge, fire risks associated with construction under this alternative would require adherence to CBC Chapter 7A and Public Resources Code 4291, similar to the proposed Project. Additionally, similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, as required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County.

Section 4.20, *Wildfire*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure TRA-1. The Aerial Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.2.21 Conclusion and Relationship to Project Objectives

The Aerial Installation Only Alternative would result in reduced impacts to air quality, energy, geology and soils, and greenhouse gas emissions; similar impacts to agriculture and forestry resources, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire; and greater impacts to aesthetics and

public services. Following is a discussion of the Aerial Installation Only Alternative's ability to attain the Project Objectives:

1. Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;

The Aerial Installation Only alternative would install aboveground fiber optic cables on new or existing utility poles. Under this alternative, the installation of new utility poles may not be feasible in some locations in the County, which would not promote the expansion of broadband network as effectively as the proposed Project. Therefore, the Aerial Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

2. Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;

The Aerial Installation Only alternative would install aboveground fiber optic cables on new or existing utility poles. Under this alternative, the installation of new utility poles may not be feasible in some locations in the County, which would not enable an increase in telework and telecommuting, with a correlated decrease in VMT, as effectively as the proposed Project. Therefore, the Aerial Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

3. Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;

The Aerial Installation Only alternative would install aboveground fiber optic cables on new or existing utility poles. Under this alternative, the installation of new utility poles may not be feasible in some locations in the County, which would not improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies as effectively as the proposed Project. Therefore, the Aerial Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

4. Streamline the environmental review process for individual fiber projects that are implemented in the County;

The Aerial Installation Only alternative would install aboveground fiber optic cables on new or existing utility poles. However, this alternative would not serve to streamline the environmental review process for individual fiber projects that seek to include new or existing underground fiber optic conduit. Therefore, the Aerial Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

5. Identify known environmental and cultural assets to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,

The Aerial Installation Only alternative would install aboveground fiber optic cables on new or existing utility poles. The installation of new utility poles may not be feasible in some locations in the County, which would exclude the identification of environmental and cultural assets in those portions of the

County under this alternative. Therefore, the Aerial Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

6. Save time and money for both El Dorado County and broadband project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review broadband projects and avoiding duplication of applicant costs.

The Aerial Installation Only alternative would install aboveground fiber optic cables on new or existing utility poles. However, as this alternative would not serve to streamline the environmental review process for individual fiber projects that seek to include underground fiber optic conduit, this alternative would not save time and money for the County and individual broadband project applicants as effectively as the proposed Project. Therefore, the Aerial Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

5.4.3 Underground Installation Only Alternative

This alternative would only include individual fiber projects that install underground fiber optic lines in new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. The following subsections compare the environmental impacts of the Underground Installation Only Alternative with the proposed Project-related impacts for each of the environmental topics analyzed in detail in Section 4.1 through 4.20 of this program EIR.

5.4.3.1 Aesthetics

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line or new utility poles would be installed under this alternative. Aesthetic impacts related to construction under this alternative would be similar to the proposed Project, as all construction activities would be temporary and short-term. However, operation under this alternative would avoid impacts to aesthetics and visual resources, as no aboveground fiber optic line or new utility poles would be installed within the viewshed of scenic vistas or U.S. 50, SR 89, or SR 88, portions of which are designated State Scenic Highways within the County. Therefore, this alternative would result in reduced aesthetic impacts as compared to the proposed Project.

Section 4.1, *Aesthetics*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure AES-1. The Underground Installation Only Alternative would result in reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.3.2 Agriculture and Forestry Resources

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, this alternative would be primarily located within previously disturbed and/or developed areas, and as such, would not convert or conflict with agriculture or forestry resources.

Section 4.2, *Agriculture and Forestry Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact to agriculture and forestry resources. The Underground

Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.3 Air Quality

Under the Underground Installation Only Alternative, construction activities would mainly include horizontal directional drilling, plowing, trenching, micro trenching, line installation, and pavement repair. Under this alternative, the installation of only underground fiber optic lines would require more ground disturbance, and the construction period would generally be longer as compared to aerial installation methods. Further, some areas of the County are known to contain NOA and ADL; the increased ground disturbance would result in increased air quality impacts associated with exposure to pollutant concentrations. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. A backup generator may be used in the event of a power outage or for routine testing, similar to the proposed Project. Similar to the proposed Project, Mitigation Measures AQ-1 and AQ-2 would be required to be implemented under this alternative to reduce potential impacts to reduce potential impacts from fugitive dust and asbestos dust.

Section 4.3, *Air Quality*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures AQ-1 and AQ-2. The Aerial Installation Only Alternative would result in slightly greater impacts as compared to the proposed Project. (*Greater Impact*)

5.4.3.4 Biological Resources

Under the Underground Installation Only alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, individual fiber projects would be required to prepare a BRA, as outlined in Mitigation Measure BIO-1 to reduce impacts to a less than significant level. Additionally, if sensitive natural communities would be impacted by project implementation, the project proponent would be required to apply for the necessary permits from the USACE, CDFW, and the RWQCB as outlined in Mitigation Measure BIO-2, and would prepare an oak resources inventory as outlined in Mitigation Measure BIO-3. Similar to the proposed Project, if an individual fiber project would impact federally protected aquatic resources, Mitigation Measure BIO-2 would be required to be implemented, and if it would impact the movement of wildlife species or wildlife corridors, Mitigation Measure BIO-1 would be implemented.

Section 4.4, *Biological Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures BIO-1 through BIO-3. The Underground Installation Only Alternative would result in similar impacts with mitigation as compared to the proposed Project. (*Similar Impact*)

5.4.3.5 Cultural Resources

Under the Underground Installation Only alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. As this alternative would only install utility poles and would be located underground, operation of individual fiber projects would not introduce a new visual element to areas with concentrations of historical built environment cultural resources such

as buildings and structures that comprise historic districts. There would be no change in the visual signature of the vicinity. However, similar to the proposed Project, individual fiber projects under this alternative could impede or destroy archaeological cultural resource's ability to convey their significance, which can embody scientific and/or traditional cultural value. Mitigation Measure CUL-1 and CUL-2 would be required to be implemented under this alternative, same as the proposed Project, to mitigate or avoid archaeological cultural resource impact scenarios.

Section 4.5, *Cultural Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures CUL-1 and CUL-2. The Underground Installation Only Alternative would result in similar impacts with mitigation as compared to the proposed Project. (*Similar Impact*)

5.4.3.6 Energy

Under the Underground Installation Only alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. Under this alternative, the installation of only underground fiber optic lines would require more ground disturbance and increased construction equipment needed for horizontal directional drilling, plowing, trenching, and micro trenching. As such, construction of this alternative would utilize slightly increased energy associated with construction as compared to the proposed Project. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. Further, operation of fiber optic lines themselves would not utilize energy; rather, the fiber optic lines transfer data. Similar to the proposed Project, this alternative would not conflict with or obstruct a State or local plan for renewable energy efficiency.

Section 4.6, *Energy*, of this program EIR, concluded that the proposed Project would result in a less than significant impact on energy efficiency. The Underground Installation Only Alternative would result in slightly greater impacts as compared to the proposed Project. (*Greater Impact*)

5.4.3.7 Geology and Soils

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. This alternative may result in increased soil erosion impacts due to increased ground disturbance required for underground installation, including construction impacts associated with horizontal directional drilling, plowing, trenching, micro trenching, and line installation. However, as compared to the proposed Project, this alternative would have similar risks of exposing people or structures to landslides, lateral spreading, subsidence, liquefaction, soil erosion, or seismic impacts as construction would occur within County limits. Further, construction methods under this alternative, including horizontal directional drilling, plowing, trenching, micro trenching, and line installation may not be feasible in some locations in the County due to the rocky subsurface conditions that would make it nearly impossible to reach the boring depth required for underground conduit.

Section 4.7, *Geology and Soils*, of this program EIR concluded that the proposed Project would result in a less than significant impact to geology and soils. The Underground Installation Only Alternative would result in slightly greater impacts as compared to the proposed Project. (*Greater Impact*)

5.4.3.8 Greenhouse Gas Emissions

Under the Underground Installation Only Alternative, construction activities would mainly include horizontal directional drilling, plowing, trenching, micro trenching, line installation, and pavement repair. This alternative would avoid construction activities such as aerial stringing. Under this alternative, the installation of only underground fiber optic lines would require more ground disturbance and increased construction equipment needed for construction methods such as horizontal directional drilling, plowing, trenching, and micro trenching. As such, this alternative would result in slightly increased impacts to GHGs associated with construction as compared to the proposed Project. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. GHG emissions are addressed within the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the TRPA Regional Plan. Similar to the proposed Project, this alternative would be consistent with the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the TRPA Regional Plan.

Section 4.8, *Greenhouse Gas Emissions*, of this program EIR concluded that the proposed Project would result in a less than significant impact to GHG emissions. The Underground Installation Only Alternative would result in slightly greater impacts as compared to the proposed Project. (*Greater Impact*)

5.4.3.9 Hazards and Hazardous Materials

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, small quantities of hazardous materials may be stored, used, and handled during construction activities or during routine maintenance checks, and may be located within one quarter mile of a school. However, this alternative could be susceptible to hazard and hazardous material impacts due to possible digging into existing, unmarked infrastructure. Some areas of the County are known to contain NOA and ADL; the increased ground disturbance resulting from underground installation methods may increase the risk of exposure to these hazardous materials. This alternative would not include the construction of utility poles or include permanent structures for human occupancy; therefore, this alternative would not interfere with airport operations or expose residents to airport-related noise. Fire risks associated with construction and operation under this alternative would require adherence to CBC Chapter 7A and Public Resources Code 4291, similar to the proposed Project; however, fiber optic lines themselves do not carry an electrical charge and would therefore not exacerbate wildland fire risk. Similar to the proposed Project, Mitigation Measure AQ-2 would be required to be implemented under this alternative to reduce potential impacts from asbestos dust and Mitigation Measure TRA-1 would be required to be implemented to manage traffic during construction.

Section 4.9, *Hazards and Hazardous Materials*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures AQ-2 and TRA-1. The Underground Installation Only Alternative would result in slightly greater impacts as compared to the proposed Project. (*Greater Impact*)

5.4.3.10 Hydrology and Water Quality

The Underground Installation Only Alternative would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed

under this alternative. Similar to the proposed Project, if this alternative would disturb more than one acre of soil, a SWPPP with project-specific BMPs would be required for each individual fiber project. As with the proposed Project, this alternative could involve minor use of water for dust control during construction. Operation under this alternative would require occasional maintenance needs, similar to the proposed Project; however, this alternative would not require additional water supplies during operation as no population would be generated.

Section 4.10, *Hydrology and Water Quality*, of this program EIR concluded that the proposed Project would result in a less than significant impact to hydrology and water quality. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.11 Land Use and Planning

The Underground Installation Only Alternative would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. As with the proposed Project, the installation of broadband infrastructure this alternative would not interfere with the continuation of existing aboveground uses after construction is completed and would not physically divide an established community. Prior to issuance of all applicable permits, individual fiber projects under this alternative would be required to demonstrate compliance with all applicable laws, regulations, policies, and ordinances, similar to the proposed Project. Additionally, as with the proposed Project, this alternative would not conflict with any land use plan, policy, or regulation. Under this alternative, individual fiber projects would be planned based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources, similar to the proposed Project.

Section 4.11, *Land Use and Planning*, of this program EIR concluded that the proposed Project would result in a less than significant impact to land use and planning. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.12 Mineral Resources

The Underground Installation Only Alternative would only install underground fiber optic lines and would utilize new or existing underground conduit. No aboveground fiber optic line would be installed under this alternative. This alternative would utilize new or existing underground conduit located within previously disturbed and/or developed areas; as such, this alternative would not interfere with the existing mines or mineral land classification studies in El Dorado County, similar to the proposed Project.

Section 4.12, *Mineral Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact to mineral resources. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.13 Noise

The Underground Installation Only Alternative would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, construction under this alternative would be required to limit construction hours and implement construction noise BMPs, as outlined under Mitigation Measure NOI-1. Similar to the proposed Project, the Underground Installation Only

Alternative would require emergency backup generators to be located more than 60 feet from a NSLU in a community area or 105 feet of a NSLU in a rural area or provide sound reduction measures to reduce noise from generators to less than 55 dBA measured at affected NSLUs, as outlined in Mitigation Measure NOI-2. Additionally, similar to the proposed Project, if construction under this alternative would use a vibratory roller, Mitigation Measure NOI-3 would require vibratory rollers to be used in static mode only (no vibrations) in proximity to occupied buildings or fragile structures. Similar to the proposed Project, this alternative would not expose people residing or working in the Project area to excessive noise levels from public use or private airstrips.

Section 4.13, *Noise*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures NOI-1 through NOI-3. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.14 Population and Housing

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, this alternative would not directly induce population growth, as the Project would not create a substantial number of jobs, promote the construction of jobs, or remove any obstacles that currently impede growth in the County. Additionally, similar to the proposed Project, this alternative would not displace people or housing or require the construction of replacement housing.

Section 4.14, *Population and Housing*, of this program EIR concluded that the proposed Project would result in a less than significant impact to population and housing. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.15 Public Services

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, this alternative would not require the construction of housing and would not contribute to substantial unplanned population growth. Therefore, the proposed Project would not generate any additional residential population that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities. However, construction methods under this alternative, including horizontal directional drilling, plowing, trenching, micro trenching, and line installation may not be feasible in some locations in the County due to the rocky subsurface conditions that would make it nearly impossible to reach the boring depth required for underground conduit. As such, operation under this alternative would not introduce a wider or more reliable network that would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. Therefore, impacts under this alternative related to police and fire protection would be slightly greater as compared to the proposed Project.

Section 4.15, *Public Services*, of this program EIR concluded that the proposed Project would result in a less than significant impact to fire protection, police protection, schools, and other public facilities, and no impact to parks. The Underground Installation Only Alternative would result in slightly greater impacts to fire protection and police protection as compared to the proposed Project, and similar impact to schools, parks, or other public facilities. (*Greater Impact*)

5.4.3.16 Recreation

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, implementation of this alternative would not require the construction of housing and, therefore, would not contribute to substantial unplanned population growth. As such, the proposed Project would not generate an increased use of neighborhood or regional parks or other recreational facilities. Additionally, implementation of both the proposed Project and this alternative would not include or require the construction or expansion of recreational facilities.

Section 4.16, *Recreation*, of this program EIR concluded that the proposed Project would result in no impact to recreation. Similar to the proposed Project, no impact would occur under the Underground Installation Only Alternative. (*Similar Impact*)

5.4.3.17 Transportation

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, as required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County. Depending on the location of individual fiber projects, an Encroachment Permit application would be required to be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3 for review and approval. Any construction on BLM land would require the ROW acquisition, and any construction on USFS land would require a construction easement. Additionally, construction under this alternative would be temporary in nature and would not result in a long-term increase in vehicular trips, similar to the proposed Project.

Section 4.17, *Transportation*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure TRA-1. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.18 Tribal Cultural Resources

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, under this alternative, Mitigation Measures TCR-1 and TCR-2 would be required to be implemented to address the unanticipated discoveries of TCRs through AB 52 consultation procedures.

Section 4.18, *Tribal Cultural Resources*, of this program EIR concluded that the proposed Project would result in less than significant impact to tribal cultural resources with implementation of Mitigation Measures TCR-1 and TCR-2. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.19 Utilities and Service Systems

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize existing or newly installed underground conduit. No aboveground fiber optic line would be installed under this alternative. Similar to the proposed Project, new underground telecommunication facilities would be installed; however, this EIR analyzes all potential environmental impacts regarding installation of broadband infrastructure. Additionally, similar to the proposed Project, this alternative would not require relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or natural gas facilities. As with the proposed Project, this alternative could involve minor use of water for dust control during construction; however, it is not anticipated this alternative would require additional water supplies during operation as no population would be generated. Additionally, during construction, it is anticipated that portable toilets could be provided for workers, and waste would be hauled to an approved facility for treatment/disposal. As wastewater associated with portable toilets would be a temporary demand, this alternative would not exceed wastewater treatment requirements of the CVRWQCB or LRWQCB, similar to the proposed Project. Due to the minimal amount of solid waste generated by individual fiber projects, this alternative would not adversely affect the jurisdictions' abilities to comply with the State waste diversion requirements.

Section 4.19, *Utilities and Service Systems*, of this program EIR concluded that the proposed Project would result in less than significant impacts to utilities and service systems. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.20 Wildfire

Under the Underground Installation Only Alternative, individual fiber projects would only install underground fiber optic lines and would utilize new or existing underground conduit. Although fiber optic lines do not carry an electrical charge, fire risks associated with construction under this alternative would require adherence to CBC Chapter 7A and Public Resources Code 4291, similar to the proposed Project. Similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, as required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County.

Section 4.20, *Wildfire*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure TRA-1. The Underground Installation Only Alternative would result in similar impacts as compared to the proposed Project. (*Similar Impact*)

5.4.3.21 Conclusion and Relationship to Project Objectives

The Underground Installation Only Alternative would result in fewer impacts to aesthetics; similar impacts to agriculture and forestry resources, biological resources, cultural resources, hydrology and water quality, land use planning, mineral resources, noise, population and housing, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire; and greater impacts

to air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, and public services. Following is a discussion of the Underground Installation Only Alternative's ability to attain the Project Objectives:

1. Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;

The Underground Installation Only alternative would install underground fiber optic lines in new or existing underground conduit. Under this alternative, the installation of new underground conduit may not be feasible in some locations in the County, which would not promote the expansion of the broadband network as effectively as the proposed Project. Therefore, the Underground Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

2. Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;

The Underground Installation Only alternative would install underground fiber optic lines in new or existing underground conduit. Under this alternative, the installation of new underground fiber optic conduit may not be feasible in some locations in the County, which would not enable an increase in telework and telecommuting, with a correlated decrease in VMT, as effectively as the proposed Project. The Underground Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

3. Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;

The Underground Installation Only alternative would install underground fiber optic lines in new or existing underground conduit. Under this alternative, the installation of new underground fiber optic conduit may not be feasible in some locations in the County, which would not improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies as effectively as the proposed Project. Therefore, the Underground Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

4. Streamline the environmental review process for individual fiber projects that are implemented in the County;

The Underground Installation Only alternative would install underground fiber optic lines in new or existing underground conduit. However, this alternative would not serve to streamline the environmental review process for individual fiber projects that seek to include aerially installation as effectively as the proposed Project. Therefore, the Underground Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

5. Identify known environmental and cultural assets to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,

The Underground Installation Only alternative would install underground fiber optic lines in new or existing underground conduit. The installation of new underground fiber optic may not be feasible in

some locations in the County, which would exclude the identification of environmental and cultural assets in those locations under this alternative. Therefore, Underground Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

6. Save time and money for both El Dorado County and broadband project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review broadband projects and avoiding duplication of applicant costs.

The Underground Installation Only alternative would install underground fiber optic lines in new or existing underground conduit. However, as this alternative would not serve to streamline the environmental review process for individual fiber projects that seek to include utility poles, this alternative would not save time and money for the County and individual broadband project applicants. The Underground Installation Only alternative would attain this objective, but not as effectively as the proposed Project.

5.4.4 Use of Existing Infrastructure Only Alternative

This alternative would include individual fiber projects that install fiber optic line in existing fiber-specific conduit or along existing utility poles in the County. The following subsections compare the environmental impacts of the Use of Existing Infrastructure Only Alternative with the proposed Project-related impacts for each of the environmental topics analyzed in detail in Section 4.1 through 4.20 of this program EIR.

5.4.4.1 Aesthetics

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Aesthetic impacts related to construction under this alternative would be similar to the proposed Project, as all construction activities would be temporary and short-term. Under this alternative, the installation of fiber optic lines in existing underground conduit would not be visible. The installation of aboveground fiber optic line under this alternative would not change the visual character of the Project area, as individual fiber projects would utilize existing infrastructure and would not construct new utility poles within the viewsheds of scenic vistas or U.S. 50, SR 89, and SR 88, portions of which are designated State Scenic Highways within the County. Therefore, this alternative would result in reduced aesthetic impacts as compared to the proposed Project.

Section 4.1, *Aesthetics*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure AES-1. The Use of Existing Infrastructure Alternative would result in reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.2 Agriculture and Forestry

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. No new underground conduit or utility poles would be installed under this alternative. Similar to the proposed Project, this alternative would be primarily located within previously disturbed and/or developed areas and would not convert or conflict with agriculture or forestry resources. However, as this alternative would utilize existing infrastructure, less

construction and ground disturbance would occur, which would result in slightly reduced impacts to agriculture and forestry resources as compared to the proposed Project.

Section 4.2, *Agriculture and Forestry Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact to agriculture and forestry resources. The Use of Existing Infrastructure Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.3 Air Quality

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Section 4.3, *Air Quality*, of this program EIR, concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures AQ-1 and AQ-2. Although ground disturbance would be required to install fiber optic line into existing underground conduit, it is anticipated that ground disturbance would be slightly reduced as compared to the proposed Project, as fiber optic line could be pulled through the existing conduit, and no new conduit would be installed. Construction methods required for aerial installation under this alternative would be limited to the aerial stringing of fiber optic line along existing utility poles. Some areas of the County are known to contain NOA and ADL; the reduced ground disturbance impacts associated with the Use of Existing Infrastructure Only Alternative would result in reduced air quality impacts associated with exposure to pollutant concentrations. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. A backup generator may be used in the event of a power outage or for routine testing, similar to the proposed Project. As this alternative would utilize existing fiber-specific conduit or existing utility poles, construction-related impacts would be slightly reduced as compared to the proposed Project.

Section 4.3, *Air Quality*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measure AQ-1 and AQ-2. The Use of Existing Infrastructure Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.4 Biological Resources

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. However, similar to the proposed Project, individual fiber projects would be required to prepare a BRA, as outlined in Mitigation Measure BIO-1 to reduce impacts to a less than significant level. Additionally, if sensitive natural communities would be impacted by project implementation, the project proponent would be required to apply to the necessary permits from the USACE, CDFW, and the RWQCB as outlined in Mitigation Measure BIO-2 and would be required to prepare an oak resources inventory as outlined in Mitigation Measure BIO-3. Similar to the proposed Project, if the individual fiber project would impact federally protected aquatic resources, Mitigation Measure BIO-2 would be required to be implemented, and if individual fiber projects would impact the movement of wildlife species or wildlife corridors, Mitigation Measure BIO-1 would be implemented. However, as less construction and ground disturbance would occur under this alternative, the potential impacts on biological resources would be slightly reduced as compared to the proposed Project.

Section 4.4, *Biological Resources*, of this program EIR concluded that the proposed Project would result in less than significant impact with implementation of Mitigation Measures BIO-1 through BIO-3. The Use of Existing Infrastructure Only Alternative would result in reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.5 Cultural Resources

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. As this alternative would not install new utility poles, individual fiber projects would not introduce new visual elements to areas with concentrations of historical built environment cultural resources such as buildings and structures that comprise historic districts. There would be no change in the existing visual signature of the vicinity. Therefore, this alternative would result in slightly reduced impacts as compared to the proposed Project. Similar to the proposed Project, individual fiber projects under this alternative could impede or destroy archaeological cultural resource's ability to convey their significance, which can embody scientific and/or traditional cultural value. Mitigation Measure CUL-1 and CUL-2 would be required to be implemented under this alternative, and under the proposed Project, to mitigate or avoid archaeological cultural resource impact scenarios. However, as less construction and ground disturbance would occur under this alternative, the potential impacts on cultural resources would be slightly reduced as compared to the proposed Project.

Section 4.5, *Cultural Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures CUL-1 and CUL-2. The Use of Existing Infrastructure Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.6 Energy

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. However, as less construction and ground disturbance would occur under this alternative, this alternative would result in a slightly reduced impact to energy associated with construction as compared to the proposed Project. Operation under this alternative would be similar to the proposed Project, as this alternative would not generate new vehicle trips beyond occasional maintenance activities. Further, operation of fiber optic lines themselves would not utilize energy; rather, the fiber optic lines transfer data. Similar to the proposed Project, this alternative would not conflict with or obstruct a State or local plan for renewable energy efficiency.

Section 4.6, *Energy*, of this program EIR, concluded that the proposed Project would result in a less than significant impact on energy efficiency. The Underground Installation Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.7 Geology and Soils

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles, which would result in reduced above ground construction activities as compared to the proposed Project. As compared to the proposed Project, this alternative would have similar risks of exposing people or structures to landslides, lateral spreading, subsidence, liquefaction, soil erosion, or seismic impacts as construction would occur within County

limits. However, as less construction and ground disturbance would occur under this alternative, this alternative would result in a slightly reduced impact to soil erosion.

Section 4.7, *Geology and Soils*, of this program EIR concluded that the proposed Project would result in a less than significant impact to geology and soils. The Use of Existing Infrastructure Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.8 Greenhouse Gas Emissions

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Section 4.8, *Greenhouse Gas Emissions*, of this EIR, concluded that the proposed Project would result in a less than significant impact to GHGs associated with construction. This alternative would result in slightly reduced impacts to GHGs associated with construction, as construction activities would be limited to the installation of fiber optic line in existing fiber-specific conduit or along existing utility poles. Operation under this alternative would be similar to the proposed Project, as this alternative would also not generate new vehicle trips beyond occasional maintenance activities. GHG emissions are addressed within the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the TRPA Regional Plan. Similar to the proposed Project, this alternative would be consistent with the El Dorado County General Plan, City of South Lake Tahoe General Plan, and the TRPA Regional Plan.

Section 4.8, *Greenhouse Gas Emissions*, of this program EIR concluded that the proposed Project would result in a less than significant impacts to GHG emissions. The Use of Existing Infrastructure Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.9 Hazards and Hazardous Materials

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles, which would result in reduced above ground construction activities as compared to the proposed Project. Although ground disturbance would be required to install fiber optic line into existing underground conduit, it is anticipated that ground disturbance would be slightly reduced as compared to the proposed Project, as fiber optic line could be pulled through the existing conduit, and no new conduit would be installed. Similar to the proposed Project, small quantities of hazardous materials may be stored, used, and handled during construction activities or during routine maintenance checks, and may be located within one quarter mile of a school. Individual fiber projects under this alternative would be required to implement and comply with existing hazardous material regulations, similar to the proposed Project. Some areas of the County are known to contain NOA and ADL; the reduced ground disturbance under this alternative would reduce the potential risk of exposure to hazardous materials. Further, this alternative would not construct any new utility poles or include permanent structures for human occupancy; therefore, individual fiber projects would not interfere with airport operations or expose residents to airport-related noise. As this alternative would utilize existing conduit and/or utility poles in previously disturbed areas, the area would have already been evaluated for hazardous materials; therefore, individual fiber projects under this alternative would not be required to prepare a Phase I ESA. Similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County.

Section 4.9, *Hazards and Hazardous Materials*, of this program EIR concluded that the proposed Project would result in less than significant impact with implementation of Mitigation Measures AQ-2 and TRA-1. The Use of Existing Infrastructure Only Alternative would result in a reduced impact as compared to the proposed Project. (*Reduced Impact*)

5.4.4.10 Hydrology and Water Quality

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Under this alternative, individual fiber projects would be constructed on existing broadband infrastructure primarily within previously disturbed areas. Similar to the proposed Project, if this alternative would disturb more than one acre of soil, a SWPPP with project-specific BMPs would be required for each individual fiber project. Operation under this alternative would require occasional maintenance needs and all construction areas would be cleared, similar to the proposed Project. As with the proposed Project, this alternative could involve minor use of water for dust control during construction; however, it is not anticipated this alternative would require additional water supplies during operation as no population would be generated. However, as this alternative would utilize existing infrastructure, less construction and ground disturbance would occur, which would result in slightly reduced impacts to hydrology and water quality.

Section 4.10, *Hydrology and Water Quality*, of this program EIR concluded that the proposed Project would result in a less than significant impact to hydrology and water quality. The Use of Existing Infrastructure Alternative would result in a reduced impact as compared to the proposed Project. (*Reduced Impact*)

5.4.4.11 Land Use and Planning

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. As with the proposed Project, the installation of broadband infrastructure this alternative would not interfere with the continuation of existing aboveground uses after construction is completed and would not physically divide an established community. Prior to issuance of all applicable permits, individual fiber projects under this alternative would be required to demonstrate compliance with all applicable laws, regulations, policies, and ordinances, similar to the proposed Project. Additionally, as with the proposed Project, this alternative would not conflict with any land use plan, policy, or regulation. Under this alternative, individual fiber projects would be planned based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources, similar to the proposed Project. However, as fewer individual fiber projects would be implemented under this alternative, this alternative would result in a slightly reduced impact on land use and planning.

Section 4.11, *Land Use and Planning*, of this program EIR concluded that the proposed Project would result in a less than significant impact to land use and planning. The Use of Existing Infrastructure Only Alternative would result in a slightly reduced impact as compared to the proposed Project. (*Reduced Impact*)

5.4.4.12 Mineral Resources

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. This alternative would utilize new or existing utility poles located within previously disturbed and/or developed areas; as such, this alternative would not

interfere with the existing mines or mineral land classification studies in El Dorado County, similar to the proposed Project. However, as less construction and ground disturbance would occur under this alternative, this alternative would result in a slightly reduced impact on mineral resources.

Section 4.12, *Mineral Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact to mineral resources. The Use of Existing Infrastructure Only Alternative would result in a reduced impact as compared to the proposed Project. (*Reduced Impact*)

5.4.4.13 Noise

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Similar to the proposed Project, construction of individual fiber projects under this alternative would be required to limit construction hours and implement construction noise BMPs, as outlined under Mitigation Measure NOI-1. Similar to the proposed Project, the Use of Existing Infrastructure Only Alternative would require emergency backup generators to be located more than 60 feet from a NSLU in a community area or 105 feet of a NSLU in a rural area or provide sound reduction measures to reduce noise from generators to less than 50 dBA measured at affected NSLUs, as outlined in Mitigation Measure NOI-2. Additionally, similar to the proposed Project, if construction under this alternative would use a vibratory roller, Mitigation Measure NOI-3 would require vibratory rollers to be used in static mode only (no vibrations) in proximity to occupied buildings or fragile structures. Both the proposed Project and this alternative would not expose people residing or working in the project area to excessive noise levels from public use or private airstrips. However, as this alternative would utilize existing infrastructure, less construction and ground disturbance would occur, which would result in slightly reduced impacts related to noise.

Section 4.13, *Noise*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures NOI-1 through NOI-3. The Use of Existing Infrastructure Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.14 Population and Housing

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Similar to the proposed Project, this alternative would not directly induce population growth, as the Project would not create a substantial number of jobs, promote the construction of jobs, or remove any obstacles that currently impede growth in the County. Additionally, similar to the proposed Project, this alternative would not displace people or housing or require the construction of replacement housing. However, as this alternative would utilize existing infrastructure, fewer local jobs related to construction of individual fiber projects would be generated, which would result in slightly reduced impacts related to population and housing.

Section 4.14, *Population and Housing*, of this program EIR concluded that the proposed Project would result in a less than significant impact on population and housing. The Use of Existing Infrastructure Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.15 Public Services

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Similar to the proposed Project, this alternative would not require the construction of housing and would not contribute to substantial unplanned population growth. Therefore, the proposed Project would not generate any additional residential population that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives for any public services including fire protection, police protection, schools, parks, or other public facilities. However, under this alternative, broadband infrastructure would not be expanded throughout the County. As such, operation under this alternative would not introduce a wider or more reliable network that would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. Therefore, impacts under this alternative related to police and fire protection would be slightly greater as compared to the proposed Project.

Section 4.15, *Public Services*, of this program EIR concluded that the proposed Project would result in a less than significant impact to fire protection, police protection, schools, and other public facilities, and no impact to parks. The Use of Existing Infrastructure Only Alternative would result in greater impacts to fire protection and police protection as compared to the proposed Project, and similar impact to schools, parks, or other public facilities. (*Greater Impact*)

5.4.4.16 Recreation

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Similar to the proposed Project, implementation of this alternative would not require the construction of housing and, therefore, would not contribute to substantial unplanned population growth. As such, the proposed Project would not generate an increased use of neighborhood or regional parks or other recreational facilities. Additionally, implementation of both the proposed Project and this alternative would not include or require the construction or expansion of recreational facilities.

Section 4.16, *Recreation*, of this program EIR concluded that the proposed Project would result in no impact to recreation. Similar to the proposed Project, no impact would occur under the Use of Existing Infrastructure Only Alternative. (*Similar Impact*)

5.4.4.17 Transportation

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, as required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County. Depending on the location of individual fiber projects, an Encroachment Permit application would be required to be submitted to the County Department of Transportation, City of Placerville Engineering Department, City of South Lake Tahoe Development Services Department, or Caltrans District 3 for review and approval. Any construction on BLM land would require the ROW acquisition, and any construction on USFS land would require a construction

easement. Additionally, construction under this alternative would be temporary in nature and would not result in a long-term increase in vehicular trips, similar to the proposed Project. However, as less construction would occur under this alternative, and therefore fewer potential lane closures, this alternative would result in a slightly reduced impact on transportation.

Section 4.17, *Transportation*, of this program EIR concluded that the proposed Project would result in less than significant impact with implementation of Mitigation Measure TRA-1. The Use of Existing Infrastructure Alternative would result in a slightly reduced impact on transportation as compared to the proposed Project. (*Reduced Impact*)

5.4.4.18 Tribal Cultural Resources

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. Similar to the proposed Project, under this alternative, Mitigation Measures TCR-1 and TCR-2 would be required to be implemented to address the unanticipated discoveries of TCRs through AB 52 consultation procedures. However, as less construction and ground disturbance would occur under this alternative, the potential impacts on TCRs would be slightly reduced as compared to the proposed Project.

Section 4.18, *Tribal Cultural Resources*, of this program EIR concluded that the proposed Project would result in a less than significant impact with implementation of Mitigation Measures TCR-1 and TCR-2. The Use of Existing Infrastructure Only Alternative would result in slightly reduced impacts as compared to the proposed Project. (*Reduced Impact*)

5.4.4.19 Utilities and Service Systems

Under the Use of Existing Infrastructure Only Alternative, fiber optic line would be installed in existing fiber-specific conduit or along existing utility poles. This alternative would not include the construction of new underground conduit or utility poles; as such, broadband network would not be expanded into areas of the County that lack existing infrastructure to support the installation of fiber optic line. Therefore, this alternative would result in reduced telecommunication impacts as compared to the proposed Project. However, similar to the proposed Project, this alternative would not require relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or natural gas facilities. As with the proposed Project, this alternative could involve minor use of water for dust control during construction; however, it is not anticipated this alternative would require additional water supplies during operation as no population would be generated. Additionally, during construction, it is anticipated that portable toilets could be provided for workers, and waste would be hauled to an approved facility for treatment/disposal. As wastewater associated with portable toilets would be a temporary demand, this alternative, would not exceed wastewater treatment requirements of the CVRWQCB or LRWQCB, similar to the proposed Project. Due to the minimal amount of solid waste generated by individual fiber projects, this alternative would not adversely affect the jurisdictions' abilities to comply with the State waste diversion requirements. However, as this alternative would utilize existing infrastructure, less construction and ground disturbance would occur, which would result in slightly reduced impacts to utilities and service systems.

Section 4.19, *Utilities and Service Systems*, of this program EIR concluded that the proposed Project would result in a less than significant impact to utilities and service systems. The Use of Existing

Infrastructure Alternative would result in a slightly reduced impact as compared to the proposed Project. (*Reduced Impact*)

5.4.4.20 Wildfire

Under the Use of Existing Infrastructure Only Alternative, individual fiber projects would utilize existing utility poles or underground fiber-specific conduit. Although fiber optic lines do not carry an electrical charge, fire risks associated with construction under this alternative would require adherence to CBC Chapter 7A and Public Resources Code 4291, similar to the proposed Project. Similar to the proposed Project, construction under this alternative may cause lane closures and would be required to submit a Traffic Control and Detour Plan, as required under Mitigation Measure TRA-1, consistent with an Encroachment Permit and code requirements of El Dorado County. However, as less construction would occur under this alternative, and therefore fewer potential lane closures, this alternative would result in a slightly reduced impact on wildfire.

Section 4.20, *Wildfire*, of this program EIR concluded that the proposed Project would result in less than significant impact with implementation of Mitigation Measure TRA-1. The Use of Existing Infrastructure Alternative would result in a slightly reduced impact as compared to the proposed Project. (*Reduced Impact*)

5.4.4.21 Conclusion and Relationship to Project Objectives

The Use of Existing Infrastructure Only Alternative would result in fewer impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gases, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, transportation, tribal cultural resources, utilities and service systems, and wildfire; similar impacts to recreation; and greater impacts to public services. The following is a discussion of the Use of Existing Infrastructure Only Alternative's ability to attain the Project Objectives:

1. Promote the construction of a broadband network in unincorporated and incorporated areas of El Dorado County;

The Use of Existing Infrastructure Only Alternative would install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, fiber optic line would only be installed in areas of the County with existing broadband infrastructure, which would not promote the expansion of the broadband network as effectively as the proposed Project. Therefore, the Use of Existing Infrastructure Only Alternative would attain this objective, but not as effectively as the proposed Project.

2. Enable an increase in telework and telecommuting, with a correlated decrease in vehicle miles traveled;

The Use of Existing Infrastructure Only Alternative would install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, fiber optic line would only be installed in areas of the County with existing broadband infrastructure, which would not enable an increase in telework and telecommuting, with a correlated decrease in VMT, as effectively as the proposed Project. Therefore, the Use of Existing Infrastructure Only Alternative would attain this objective, but not as effectively as the proposed Project.

3. Improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies;

The Use of Existing Infrastructure Only Alternative would install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, fiber optic line would only be installed in areas of the County with existing broadband infrastructure, which would not improve public health and safety through enhancing telemedicine, enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies as effectively as the proposed Project. Therefore, the Use of Existing Infrastructure Only Alternative would not attain this objective.

4. Streamline the environmental review process for individual fiber projects that are implemented in the County;

The Use of Existing Infrastructure Only Alternative would install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, fiber optic line would only be installed in areas of the County with existing broadband infrastructure; as such, this alternative would not serve to streamline the environmental review process for individual fiber projects that seek to include existing utility poles or underground conduit. Therefore, the Use of Existing Infrastructure Only Alternative would attain this objective, but not as effectively as the proposed Project.

5. Identify known environmental and cultural assets to be protected and/or restored with an approved set of preservation measures and/or mitigations; and,

The Use of Existing Infrastructure Only Alternative would install fiber optic line in existing fiber-specific conduit or along existing utility poles. As this alternative would only utilize existing conduit and/or utility poles, the area would have already been evaluated for environmental and cultural assets. Therefore, this alternative would exclude the identification of environmental and cultural assets in locations outside of the alternative project area. Therefore, the Use of Existing Infrastructure Only Alternative would not attain this objective.

6. Save time and money for both El Dorado County and broadband project applicants, resulting in greater government and economic efficiencies, reducing the amount of County staff time required to review broadband projects and avoiding duplication of applicant costs.

The Use of Existing Infrastructure Only Alternative would install fiber optic line in existing fiber-specific conduit or along existing utility poles. Under this alternative, fiber optic line would only be installed in areas of the County with existing broadband infrastructure; therefore, this alternative would not serve to streamline the environmental review process for individual fiber projects that seek to include existing utility poles or underground conduit. As such, this alternative would not save time and money for the County and individual broadband project applicants as effectively as the proposed Project. Therefore, the Use of Existing Infrastructure Only Alternative would attain this objective, but not as effectively as the proposed Project.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmentally superior alternative is the alternative expected to generate the least significant impact. In addition to the discussion and comparison of impacts of the project and the alternatives, Section 15126.6 of the CEQA Guidelines requires that an “environmentally superior” alternative be identified. Identification of the environmentally superior alternative is an informational procedure, and the alternative identified may not be the alternative that best meets the goals or needs of El Dorado County.

The No Project Alternative has the least impact on the environment because it would not involve any construction of broadband infrastructure within the County. However, the No Project Alternative would not meet any of the Project Objectives presented in Section 5.2, *Project Objectives and Significant Impacts*. When the environmentally superior alternative is the No Project Alternative, the CEQA Guidelines (Section 15126[d][2]) require selection of an environmentally superior alternative from among the other action alternatives evaluated.

The Aerial Installation Only Alternative would result in greater impacts to aesthetics, as individual fiber projects could be constructed within the viewsheds of scenic vistas or U.S. 50, SR 89, and SR 88, portions of which are designated State Scenic Highways within the County. Additionally, this alternative would result in greater impacts to public services, as it would not introduce a wider or more reliable network that would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies, thereby increasing impacts on police and fire protection as compared to the proposed Project. However, as construction of individual fiber projects would require less ground disturbance, it would result in slightly reduced impacts to air quality, energy, geology and soils, and greenhouse gas emissions as compared to the proposed Project. While this alternative is feasible and would achieve most Project Objectives, it would not achieve the Project Objectives as effectively as the proposed Project.

The Underground Installation Only Alternative would result in greater impacts to public services, as it would not introduce a wider or more reliable network that would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies, thereby increasing impacts on police and fire protection as compared to the proposed Project. Additionally, the installation of underground fiber optic lines typically requires more ground disturbance and longer construction periods as compared to aerial installation. Increased construction-related impacts could occur due to the increased ground disturbance required for installation, including horizontal directional drilling, plowing, trenching, micro trenching, and line installation. As such, impacts to air quality, energy, geology and soils, and greenhouse gas emissions would be greater than the proposed Project. Under this alternative, underground fiber optic lines could be constructed in areas that have existing buried utilities that could contain hazardous waste. Additionally, some areas of the County are known to contain NOA and ADL; the increased ground disturbance resulting from underground installation methods may increase the risk of exposure to hazardous materials. However, as this alternative would not include the construction of new utility poles, it would avoid impacts to aesthetics. While this alternative is feasible and would achieve most Project Objectives, it would not achieve the Project Objectives effectively as the proposed Project.

Under the Use of Existing Infrastructure Only Alternative, individual fiber projects would utilize existing poles or conduit and would not include the construction of new underground conduit or utility poles. As this alternative would utilize existing infrastructure, it would avoid or reduce impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, transportation, tribal cultural resources, utilities and service systems, and wildfire. However, this alternative would result in slightly greater impacts on public services as this alternative would not introduce a wider or more reliable network that would improve public health and safety through enabling faster emergency response, enhanced communication between emergency services, and access to critical information during disasters or emergencies. Therefore, as shown in Table 5-1, the Use of Existing Infrastructure Only Alternative is environmentally superior to the proposed Project and other alternatives, as it would most greatly reduce potential impacts associated with the proposed Project. However, the Use of Existing Infrastructure Only Alternative would only meet four out of the six Project Objectives.

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6.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the California Environmental Quality Act (CEQA) Guidelines requires an Environmental Impact Report (EIR) to discuss the extent to which a proposed project or plan would commit nonrenewable resources to uses that future generation would probably be unable to reverse. Significant irreversible changes include the use of nonrenewable resources, the commitment of future generations to similar use, irreversible damage resulting from environmental accidents associated with the project, and irretrievable commitments of resources. The CEQA-required categories of irreversible changes are discussed below.

6.1 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS

Potential environmental accidents of concern include those that would have adverse effects on the environment or public health due to the nature or quantity of material released during an accident and the receptors exposed to that release. Construction activities associated with individual fiber projects under the Project would involve some risk for environmental accidents. These activities would be monitored, however, by federal, State, and local agencies that would follow industry standards governing the use, storage, transport, and disposal of hazardous materials. Additionally, the proposed land use would not include any activities that are likely to contribute to or be the cause of a significant environmental accident. As a result, the proposed Project would not pose a substantial risk of environmental accidents.

6.2 LARGE COMMITMENT OF NON-RENEWABLE RESOURCES

Non-renewable resources include fossil fuels and metals. Energy will be consumed during both construction and operation of individual fiber projects under the Project. Materials that could be used for construction of individual fiber projects include rocks, wood, concrete, glass, and steel. However, the use of non-renewable resources would account for only a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Construction contractors for individual fiber projects would use the best available engineering techniques, construction and design practices, and equipment operating procedures. The operational phase would consume energy for potential security lighting. Energy in the form of fossil fuels will be used by vehicles traveling to and from the Project area for routine maintenance trips or for emergency purposes; however, the Project would not require new, permanent staff in comparison to existing conditions. Therefore, implementing the Project would not result in inefficient use of energy.

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7.0 GROWTH INDUCEMENT

Section 15126.2(d) of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) discuss the ways in which a proposed project or plan could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

A project could be considered to have growth-inducing effects if it: 1) either directly or indirectly fosters economic or population growth or the construction of additional housing in the surrounding area; 2) removes obstacles to population growth; 3) requires the construction of new community facilities that could cause significant environmental effects; or, 4) encourages and facilitates other activities that could significantly affect the environment, either individually or cumulatively. Growth-related impacts are those that are expected to occur later in time or are farther removed in distance, but which are still reasonably foreseeable.

A project's potential to induce growth does not automatically mean that it will result in growth. This potential growth-inducing effect is regulated by local governments in California through the development, adoption, and implementation of land use plans and policies intended to avoid or minimize the growth inducing potential or pressure created by projects, individually or cumulatively. Growth occurs through capital investment in new economic opportunities from both public and private entities. Development occurs as a result of economic investment in a particular region. New economic (i.e., employment) opportunities will naturally create the need for infrastructure to support an increased population.

Growth typically is the result of numerous factors that affect the location, size, direction, timing, type, and rate of population increase and does not necessarily result from a single project or factor. Such factors include local government planning, availability of public services, natural resources, the economic climate, and political and environmental concerns. Local planning agencies adopt and administer general and specific plans, zoning maps and ordinances, and other planning documents that contain policies, standards, and maps to identify the intensity and type of development allowed in specific locations.

Although local governments play a major role in growth management, the location and timing of growth also depends on economic factors such as the availability and cost of developable land, regional and national economic cycles, mortgage interest rates, and the demand for new housing. Political factors that affect growth include state and local laws that mandate businesses to comply with certain rules and regulations, permitting requirements that address environmental and community concerns, and tax incentives designed to attract businesses.

7.1 GROWTH INDUCING IMPACTS

Economic growth in a community that is caused by a project can induce secondary development or growth. The following discussion focuses on the proposed Project's potential to result in physical changes in the environment resulting from the development of new infrastructure.

7.1.1 Additional Infrastructure

El Dorado County (County) is proposing to expand access to fiber optic broadband technology throughout the unincorporated areas and the incorporated cities of the County. The majority of the broadband infrastructure would be installed within the typical roadway cross-section within the unincorporated areas of the County, incorporated cities of Placerville and South Lake Tahoe, or California Department of Transportation's (Caltrans') public rights-of-way (ROW). However, broadband infrastructure could also be constructed on private and federal lands and connect to existing conduit or utility poles located within public or private utility easements. This proposed Project would help attract broadband infrastructure investors to bring broadband service to a County in need of reliable connectivity for increasing health and safety factors, as well as for economic and quality of life reasons.

The proposed Project would not directly induce growth, as the Project would not create a significant number of jobs, promote the construction of new homes, or remove any obstacles that impede growth in the County. Construction of individual fiber projects is anticipated to commence in Spring of 2025 and would occur over the course of many years. Operation of individual fiber projects would be limited to routine maintenance or emergencies. It is anticipated that implementation of the proposed Project would not generate a substantial number of jobs, either temporarily during construction of individual fiber projects or during maintenance operation, to generate population growth within the County. Additionally, operation of the proposed Project would provide and expand the availability of high-speed internet access to existing rural residents, businesses, schools, etc. in the County. Implementation of the proposed Project is expected to contribute to the retention of existing residents and businesses, which could indirectly contribute to a minimal amount of future growth. However, the introduction of improved internet access would not be expected to trigger an influx beyond the anticipated growth evaluated and mitigated in the applicable jurisdictions' general plan. Therefore, the proposed Project would not induce additional growth beyond what has been evaluated in this program EIR.

7.1.2 Additional Economic Growth

Construction of the proposed Project would result in short-term economic growth for the area as it is anticipated that construction jobs would be primarily filled by local residents, employees, and suppliers in the area. The effect of the proposed Project on growth-inducing impacts is difficult to distinguish from other factors that cause people to move to an area. The availability of high-speed, high-volume communications is one factor among many in the decision by people and businesses to move to a specific region or area. The proposed Project would not create a significant number of jobs, promote the construction of homes, or remove any obstacle that impedes growth in El Dorado County.

Existing public facilities in the Project area would sufficiently serve the proposed Project. Police protection services would be provided by the El Dorado County Sheriff's Department, City of Placerville Police Department, City of South Lake Tahoe Police Department, and the Valley Division of the California Highway Patrol. Fire protection services would be provided by 13 local fire districts and departments, California Department of Forestry and Fire Protection (CAL FIRE), and the U.S. Forest Service (USFS). The proposed Project would be adequately served by the existing fire protection, police protection, library, recreation, and other services in the County, and would not require the expansion of these services that could induce growth beyond the proposed Project. As analyzed in Section 4.19, *Utilities and Service Systems*, of this program EIR, the proposed Project would construct new telecommunication facilities; all other utilities including water, wastewater treatment or storm water drainage, electric power, and

natural gas would be adequate to serve the proposed Project and would not require expansion that could potentially induce growth beyond the proposed Project.

One of CEQA's primary purposes in addressing "growth inducing impacts" is to identify the environmental impacts or consequences of growth that results from implementing a project. To attempt to predict specifically where growth would occur would be speculative. It is known that this indirect growth could result in transportation, air quality, noise, and hydrology impacts. These indirect impacts could also include temporary construction impacts related to air quality, noise, and hydrology and water quality. The severity of these impacts depends on the size and location of the induced growth. Based upon the limited possible amount of growth that could occur as a result of the Project, it is reasonable to conclude that the proposed Project would not result in a significant growth inducing impact.

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8.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

8.1 BACKGROUND

Sections 21067, 15126(b), and 15126.2(b) of the California Environmental Quality Act (CEQA) Guidelines require that an Environmental Impact Report (EIR) describe any potentially significant project impacts, including those that can be mitigated but not reduced to a less than significant level.

8.2 PROJECT SIGNIFICANT AND UNAVOIDABLE IMPACTS

This program EIR did not identify any significant and unavoidable impacts.

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9.0 PREPARERS

This document has been completed by El Dorado County, as the California Environmental Quality Act (CEQA) Lead Agency for the proposed Project, with support from the following organizations and professional staff:

ENVIRONMENTAL IMPACT REPORT

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