



Draft
Environmental Impact Report

Nevada County Broadband Program

SCH No.: 2021120435

Prepared for:



September 2022



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Prepared for:



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LIST OF ABBREVIATIONS

°F	degrees Fahrenheit
2017 Scoping Plan	<i>California's 2017 Climate Change Scoping Plan</i>
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ALUCP	airport land use compatibility plan
AMSL	above mean sea level
BERD	Built Environment Resources Directory
BMP	best management practice
C&D	construction and demolition
CAA	federal Clean Air Act
CAFE	corporate average fuel economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARI	California Aquatic Resource Inventory
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHL	California Historical Landmarks
CHP	California Highway Patrol
CI	carbon intensity

CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CO ₂	carbon dioxide
County	Nevada County
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act
CWPP	community wildfire protection plan
dB	decibels
DOE	Archaeological Determinations of Eligibility
Draft EIR	draft environmental impact report
DSL	digital subscriber line
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
ECA	Essential Connectivity Areas
EIR	environmental impact report
EO	Executive Order
EOP	Emergency Operations Plan
EPA	US Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986
ESA	federal Endangered Species Act
EV	electric vehicle
FAA	Federal Aviation Administration
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GBV	Ground-Borne Vibration
GHG	greenhouse gas

HCP	habitat conservation plan
Hz	hertz
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
JOA	Joint Operating Agreement
LCFS	Low Carbon Fuel Standard
L _{dn}	Day-Night Level
L _{eq}	Equivalent Continuous Sound Level
L _{max}	Maximum Sound Level
LOS	level of service
LRA	local responsibility area
LUST	leaking underground storage tank
Mbps	megabits per second
MBTA	Migratory Bird Treaty Act
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
mPa	micro-Pascals
MRF	Material Recovery Facility
MRZ	Mineral Resource Zone
MTCO ₂ e	metric tons of carbon dioxide equivalent
MVGB	Martis Valley Groundwater Basin
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NCEHD	Nevada County Environmental Health Department
NCLHMP	Nevada County Local Hazard Mitigation Plan
NCTC	Nevada County Transportation Commission
NEHRP	National Earthquake Hazards Reduction Program
NHTSA	National Highway Traffic Safety Administration
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places

NSAMQD	Northern Sierra Air Quality Management District
OHP	Office of Historic Preservation
OPR	Governor's Office of Planning and Research
OSHA	federal Occupational Safety and Health Administration
PHI	California Points of Historical Interest
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1970
PPV	peak particle velocity
PRC	Public Resources Code
program	Nevada County Broadband Program
RMS	root-mean-square
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	regional water quality control board
SARA Title III	Superfund Amendments and Reauthorization Act of 1986
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act of 2014
SMAQMD	Sacramento Metropolitan Air Quality Management District
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SR	State Route
SRA	State Responsibility Area
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TART	Truckee Area Regional Transportation
TCM	transportation control measures
TDM	transportation demand management
TISG	Transportation Impact Study Guide
TMDL	total maximum daily load
TPZ	Timberland Production Zone

USC	US Code
USDOT	US Department of Transportation
USFWS	US Fish and Wildlife Service
UST	underground storage tanks
VdB	vibration decibels
VMT	vehicle miles traveled
WEAP	Worker Environmental Awareness Program
WQO	water quality objectives
ZEV	zero-emission vehicle

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This summary is provided in accordance with California Environmental Quality Act Guidelines (State CEQA Guidelines) Section 15123. As stated in Section 15123(a), "an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical." As required by the guidelines, this chapter includes (1) a summary description of the proposed Nevada County Broadband Program (proposed program) (i.e., project pursuant to State CEQA Guidelines Section 15378), (2) a synopsis of significant and potentially environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and the environmentally superior alternative, and (4) a discussion of the areas of controversy associated with the program.

ES.2 SUMMARY DESCRIPTION OF THE PROJECT

ES.2.1 Project Location

The program area extends throughout much of Nevada County (county), located in the Sierra Nevada and foothills, approximately 30 miles northeast of Sacramento at its closest approach. The area in which future individual broadband projects could be implemented includes unincorporated areas of the county, City of Grass Valley, Nevada City, and Town of Truckee; it excludes federal lands and state highway rights-of-way. Unincorporated areas expected to be served by future broadband projects include the Donner Pass Road area (including the Serene Lakes area), Kingvale, Soda Springs, Cisco Grove, Washington, and other small communities. The exact alignments of future broadband projects are unknown at this time and would be based on such considerations as construction feasibility, local preference, and locations of sensitive environmental resources.

ES.2.2 Background and Need for the Project

Broadband provides high speed internet access via multiple types of technologies, including fiber optics, wireless, cable, digital subscriber line (DSL), and satellite. 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 use of the internet has become prohibitive to perform daily, essential tasks.

The ability to provide broadband internet in Nevada County has been challenging for several reasons. Primarily, the topography and geography of the county present barriers to broadband connectivity. Subsurface rock throughout the county is difficult and expensive to trench and dense forests, hills, and canyons obstruct the lines-of-sight needed for wireless technology. Also, the rural nature of the county does not support the population density needed to show sufficient returns on investment for some broadband project investors.

Since 2000, Nevada County has played an active role in promoting increased local broadband coverage. Some of the actions and policies that have been implemented to support broadband service and infrastructure include:

- ▶ providing grants to fund broadband projects implemented by local internet service providers;
- ▶ approving road standards to support an open trench "Dig Once" policy, which maximizes the potential for broadband to be included in any open trench construction activity taking place in the unincorporated county;
- ▶ approving the Nevada County Broadband Strategy Plan—a plan created by the Sierra Business Council that outlines various strategies for how broadband can be improved and expanded across the county; and

- ▶ approving the Last-Mile Broadband Grant—a pilot program to leverage county funds to support the development of Last-Mile broadband infrastructure in the unincorporated areas of the county to promote economic development. Last-Mile refers to connecting the end-user or customer’s home or business to a local network provider. The development of Last-Mile transmission networks is the most cost-prohibitive component of broadband expansion in Nevada County.

Expansion of broadband service and infrastructure is vital to the communities in Nevada County for many reasons, which include:

- ▶ building social and community connections,
- ▶ civic engagement and participation,
- ▶ economic development and sustainability,
- ▶ education and continuous learning,
- ▶ health care and tele-health services, and
- ▶ recreation and entertainment.

ES.2.3 Project Objectives

The objectives of the program are to:

- ▶ provide upgradable and expandable high-speed broadband capacity in the service areas with minimum speeds of 25 megabits per second (Mbps) for downloads and 5 Mbps for uploads, consistent with the federal definition of “adequate service” for broadband and California’s definition of broadband;
- ▶ provide a wireless broadband network in unserved and underserved areas of Nevada County;
- ▶ enable an increase in telecommuting, with a commensurate decrease in vehicle miles traveled;
- ▶ provide broadband infrastructure to support future statewide interconnection of major public safety answering points and a future statewide public safety network;
- ▶ enable connection of health facilities in the county through the California Telehealth Network;
- ▶ streamline the environmental review process for individual broadband projects that are implemented in the county;
- ▶ provide a reliable foundation of data and acceptable methodology to assess impacts for any specific broadband deployment project;
- ▶ 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 the county of Nevada 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.

ES.2.4 Characteristics of the Project

The program could develop approximately 2,230 miles of fiber-based infrastructure along public and private roadways and in previously disturbed and/or developed areas. New fiber optic line would be installed in existing conduit in some locations, which would not involve substantial new ground disturbance. Fiber optic conduit could also be installed to provide lateral connections to residences and businesses and under roadways where space is limited alongside the roadways. In new conduit construction, two conduits with microducts (smaller diameter conduits within a larger conduit) would be installed approximately 48 inches below the ground surface. The conduits

would include 1.25-inch-diameter and 2-inch standard dimension ratio polyethylene pipe. Microtrenching would also occur under the program, which would place conduit generally between 12 and 26 inches belowground. Access for maintenance purposes to the new conduits would be provided by installing access boxes (vaults) at intervals of not more than 3,000 feet along a route for an individual fiber project. Vaults are sized to accommodate pulling fiber through conduits. The general dimensions for each access vault would be 17 inches by 30 inches, 36 inches by 60 inches, or 24 inches by 36 inches, and would extend to 48 inches belowground surface.

Where topography or underground substrate would prohibit or impede subsurface fiber optic installation, individual fiber projects would install aboveground fiber optic line that would utilize existing or newly constructed utility poles.

Individual fiber projects that would be developed and implemented under the proposed program would be evaluated using a checklist developed by the County to document the evaluation of the individual project site and activities to determine whether or not it is a later activity within the scope of the analysis in this EIR (State CEQA Guidelines Section 15168[c]). If the activities are determined to be within the scope of the EIR, the applicable lead agency (determined by location of the individual fiber project) may approve the activities using this EIR without an additional environmental document (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 would be prepared to determine whether the new impact would require preparation of an EIR, negative declaration, or a mitigated negative declaration. That later analysis may tier from the program EIR as provided in State CEQA Guidelines Section 15152. Individual fiber projects could also require permits or approvals from other state, regional, or local agencies.

ES.3 ALTERNATIVES TO THE PROPOSED PROGRAM

The following provides brief descriptions of the alternatives evaluated in this Draft EIR. Table ES-2 presents a comparison of the environmental impacts between the alternatives and the proposed program.

- ▶ **Alternative 1: No Project Alternative** assumes no additional broadband infrastructure would be installed and broadband capacity would be unchanged from existing conditions.
- ▶ **Alternative 2: Reduced Program Area Alternative** would focus on rural broadband infrastructure and exclude the incorporated areas of the Town of Truckee, City of Grass Valley, and Nevada City from the program area as a strategy to reduce construction effects in more densely populated areas.
- ▶ **Alternative 3: Existing Infrastructure Alternative** would prioritize the use of existing utility poles or underground conduit wherever it exists. New underground conduit would only be installed in areas where no existing aboveground or belowground infrastructure exists. This alternative is intended to reduce impacts associated with new infrastructure installation.

ES.3.1 Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior alternative is the No Project alternative, the EIR also is required to identify an environmentally superior alternative among the other alternatives.

Because the No Project Alternative would avoid all adverse impacts resulting from construction and operation of the proposed program, it is the environmentally superior alternative. However, the No Project Alternative would not meet the objectives of the program. As illustrated in Table ES-2, below, both Alternatives 2 and 3 would provide some environmental advantages over the proposed program.

The Reduced Program Area Alternative (Alternative 2) would result in less overall construction and operation of broadband infrastructure by avoiding all activities within incorporated communities. This would result in incrementally reduced impacts to all resource areas. While this alternative is feasible and would achieve most of the basic project objectives, it would achieve the project objectives to a lesser degree than the proposed program because it would

not improve broadband availability or reliability within the Town of Truckee, City of Grass Valley, or Nevada City, and would not provide benefits to the approximately 32,500 residents of those three incorporated communities.

The Existing Infrastructure Alternative would result in less overall construction of broadband infrastructure than both the proposed program and Alternative 2 because it would use existing utility poles and conduit and only construct new conduit where no existing infrastructure is available. This alternative would result in more fiber optic line installed aboveground on existing utility poles. This alternative would result in similar impacts to aesthetics and lesser impacts to all other resource areas compared to the proposed program. While this alternative would lessen multiple environmental impacts, it would result in a less reliable broadband network due to the increased prevalence of aboveground fiber optic line that could be affected by wildfires. This would achieve the project objectives to a lesser degree than the proposed program.

Both Alternatives 2 and 3 would offer different environmental benefits when compared to the proposed program. Both alternatives are potentially feasible and would achieve most of the basic project objectives, although project objectives would be achieved to a lesser degree than under the proposed program. Alternative 3: Existing Infrastructure Alternative, is the environmentally superior alternative because it would slightly reduce all other impacts associated with the proposed program.

ES.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

A notice of preparation (NOP) was distributed for the proposed program on December 17, 2021, to responsible agencies, trustee agencies, interested parties and organizations, and private organizations and individuals that could have interest in the program. The NOP and responses to the NOP are included in Appendix A of this Draft EIR. Key concerns and issues that were expressed about the proposed program during the scoping process included the following:

- ▶ potential construction-related impacts to groundwater and surface water quality,
- ▶ potential impacts on tribal cultural resources and consultation with Native American tribes, and
- ▶ potential for conflicts in the California Department of Transportation right-of-way.

All of the substantive environmental issues raised in the NOP comment letters and at the scoping meeting have been addressed or otherwise considered during preparation of this Draft EIR.

ES.5 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

ES.5.1 Project-Specific Impacts

This EIR has been prepared pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 1500, et seq.) to evaluate the physical environmental effects of the proposed Nevada County Broadband Program. The County is the lead agency for the program and has the principal responsibility for approving and carrying out the program and for ensuring that the requirements of CEQA have been met. After the Final EIR is prepared and the EIR public-review process is complete, the Nevada County Board of Supervisors is the party responsible for certifying that the EIR adequately evaluates the impacts of the project (i.e., program). In accordance with State CEQA Guidelines Section 15096, the incorporated jurisdictions (i.e., City of Grass Valley, Nevada City, and Town of Truckee) acting as responsible agencies must consider the EIR prepared by the County and reach their own conclusions on whether and how to approve the program.

Table ES-1 summarizes the significant and potentially significant environmental effects that would result from implementation of the proposed program, provides recommended mitigation measures, and identifies the level of

significance of the impact before and after mitigation. Impacts that are less-than-significant and do not require mitigation measures are included in the technical resource sections of this EIR (see Sections 3.2 through 3.10).

ES.5.2 Significant-and-Unavoidable Impacts and Cumulative Impacts

State CEQA Guidelines Section 15126.2(b) requires that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a less-than-significant level. Sections 3.2 through 3.10 of this EIR address the potential environmental effects associated with the proposed program and recommend mitigation measures, as necessary, to mitigate potential effects associated with program implementation to the extent feasible. The analysis concludes that the proposed program would not result in significant and unavoidable impacts.

Table ES-1 Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable</p>			
<p>Archaeological, Historical, and Tribal Cultural Resources</p>			
<p>Impact 3.3-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource It is possible that fiber conduit installation could occur on the County's three bridges that have been determined eligible for listing in the NRHP and CRHR. While it is unlikely that the installation of a 4- to 6-inch galvanized iron pipe would result in a disturbance or alteration of existing features such that a change in a bridge's historical significance would result, the possibility remains. This impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 3.3-1: Protect Historic Bridges If new fiber conduit needs to be installed on Edwards Crossing Bridge (Bridge No. 17C0006), Purdon Crossing Bridge (Bridge #17C0024), or Donner Summit Bridge (Bridge No. 17C0052), the galvanized iron pipe shall be attached to the underside of the bridge in order to eliminate any visual obstruction of the bridge. If it is not possible to install the galvanized iron pipe under the bridge, it shall be installed on the side in such a way that provides maximum concealment. This could be accomplished by painting the pipe a similar color as the bridge material, installing the pipe alongside existing utility pipes on the bridge, or installing the pipe under the lip of the bridge deck or other concealed location.</p>	<p>LTS</p>
<p>Impact 3.3-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources Installation of new fiber conduit could be located on properties that contain known or unknown archaeological resources and ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. This would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 3.3-2a: Identify and Protect Archaeological Resources During project-specific environmental review of individual broadband projects, the County (or other incorporated jurisdiction) shall define each project's area of effect for archaeological resources. The County shall determine the potential for the project to result in archaeological resource impacts; based on the extent of ground disturbance and site modification anticipated for the program. The County shall determine the level of archaeological investigation that is appropriate for the project site and activity, as follows:</p> <ul style="list-style-type: none"> ▶ Directional Drilling <ul style="list-style-type: none"> ▪ If directional drilling is to occur in UAIC's high sensitivity zone and has more than three bore entry/exit points (six total), then a records search will be conducted through NWIC, and a qualified archaeological professional will survey the entry/exit point areas (if not paved). If the records search is positive and is confirmed by the survey results, then a qualified professional shall be retained to monitor any ground-disturbing activities. Standard stop-work mitigation measures shall be implemented (refer to Mitigation Measure 3.3-2b). If the subsequent project has fewer than three bore entry/exit points, no protection measures are required. ▪ If directional drilling is to occur in UAIC's low sensitivity zone and has more than six bore entry/exit points (12 total) then a records search will be conducted through NWIC, and a qualified archaeological professional will survey the entry/exit point areas (if not paved) if the records search result is positive. Standard stop-work mitigation measures shall be implemented 	<p>LTS</p>

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p>	<p>(refer to Mitigation Measure 3.3-2b). If fewer than six bore entry/exit points, no protection measures are required.</p> <ul style="list-style-type: none"> ▶ Plowing and Trenching <ul style="list-style-type: none"> ▪ If plowing and trenching is to occur in UAIC's high sensitivity zone and the plow slot is more than 350 feet, a records search will be conducted through NWIC, and a qualified archaeological professional will survey the plow slot area (if not paved). If the records search is positive and is confirmed by the survey results, then a qualified professional shall be retained to monitor any ground-disturbing activities. Standard stop-work mitigation measures shall be implemented (refer to Mitigation Measure 3.3-2b). If less than 350 feet, no protection measures are required. ▪ If plowing and trenching is to occur in UAIC's low sensitivity zone and the plow slot is more than 350 feet, a records search will be conducted through NWIC, and a qualified archaeological professional will survey if the records search result is positive. Standard stop-work mitigation measures shall be implemented (refer to Mitigation Measure 3.3-2b). If less than 350 feet, no protection measures are required. ▶ New Poles and Access Vaults <ul style="list-style-type: none"> ▪ If more than three new poles and access vaults are proposed in UAIC's high sensitivity zone, a records search will be conducted through NWIC, and a qualified archaeological professional will survey the areas (if not paved). If the records search is positive and is confirmed by the survey results, then a qualified professional shall be retained to monitor any ground-disturbing activities. Standard stop-work mitigation measures shall be implemented (refer to Mitigation Measure 3.3-2b). If less than three poles/vaults, no protection measures are required. ▪ If more than six new poles and access vaults are proposed in UAIC's low sensitivity zone, then a records search will be conducted through NWIC, and a qualified archaeological professional will survey the areas (if not paved) if the records search is positive. Standard stop-work mitigation measures shall be implemented (refer to Mitigation Measure 3.3-2b). If less than six poles/vaults, no protection measures are required. ▶ Micro Trenching <ul style="list-style-type: none"> ▪ No protection measures are required. 	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
LTS = Less than significant	PS = Potentially significant	S = Significant SU = Significant and unavoidable	
<p>Mitigation Measure 3.3-2b: For All Ground-Disturbing Construction Activities, Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features</p> <p>In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits are discovered during construction, all ground-disturbing activity within 100 feet of the find shall be halted and a qualified professional archaeologist shall be retained to assess the significance of the find. If the qualified archaeologist determines the archaeological material to be Native American in nature, the applicant shall contact the appropriate Native American tribe for their input on the preferred treatment of the find. If the find is determined to be significant by the archaeologist (i.e., because it is determined to constitute a unique archaeological resource), the archaeologist shall develop, and the applicant shall implement, appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.</p>			
<p>Impact 3.3-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource</p> <p>Although consultation did not result in the identification of any tribal cultural resources, UAIC expressed concern that resources could be discovered during ground-disturbing activities. Therefore, impacts to TCRs would be potentially significant.</p>	PS	<p>Mitigation Measure 3.3-3a: Contact Geographically Affiliated Native American Tribes</p> <p>During project-specific environmental review of subsequent broadband projects, the project proponent shall consult with the County to determine if the project site is in a high- or low-sensitivity area for tribal resources, according to a confidential map kept on file with the County. If the project site is located within an area of high sensitivity, the project proponent will notify UAIC. The notification will contain the following:</p> <ul style="list-style-type: none"> ▶ A written description of the type of ground disturbance, location, and boundaries. ▶ A map of the project area at a sufficient scale to indicate the spatial extent of activities. ▶ A description of the activities (e.g., horizontal directional drilling, trenching, aboveground poles). ▶ A detailed description of the depth of excavation. ▶ A request for information regarding potential impacts to tribal cultural resources from the proposed ground-disturbing activities. 	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p>	<p>If coordination with the Tribe confirms that the project site has a high sensitivity for tribal cultural resources, the project proponent will coordinate with UAIC to conduct a site-specific survey of the project area, assuming it is not paved. If tribal cultural resources are identified within a project area and cannot be avoided, implement Mitigation Measure 3.3-3b. If the project site is located within low sensitivity, then implement Mitigation Measure 3.3-3c.</p> <p>Mitigation Measure 3.3-3b: Treatment of Tribal Cultural Resources that Cannot be Avoided</p> <p>The project proponent, in consultation with UAIC, will develop effective protection measures for important tribal cultural resources located within the project site; a tribal monitor will be present on-site for all ground-disturbing activities. These measures may include reburial, if culturally appropriate, or tribal retention. Reburial will take place on-site in a location not subject to further disturbance. Permanent curation of tribal cultural resources will not take place unless approved in writing by UAIC. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented.</p> <p>Mitigation Measure 3.3-3c: Unanticipated Discovery of Tribal Cultural Resources</p> <p>If any suspected tribal cultural resources are discovered during ground disturbing construction activities, all work shall cease within 50 feet of the find, UAIC shall be notified, and a qualified archaeologist shall be retained. A UAIC tribal representative, in conjunction with the qualified archaeologist, shall determine if the find is a tribal cultural resource, pursuant to PRC Section 21074. The tribal representative will make recommendations for further evaluation and culturally appropriate treatment of discovered tribal cultural resources as necessary in consultation with the archaeological professional. No data recovery or curation of any physical tribal cultural resource will be allowed unless this is the preference of the tribe, as confirmed in writing. Preservation in place is the preferred mitigation. If the County determines that preservation in place is not feasible, reburial if culturally appropriate will take place on-site in a location not subject to further disturbance. The reburial site will be agreed upon in advance by the tribe and the project applicant. Work at the discovery location cannot resume until all necessary investigation, evaluation, and treatment of the discovery under the requirements of CEQA have been satisfied.</p>	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable</p>			
<p>3.4 Biological Resources</p>			
<p>Impact 3.4-1: Result in Disturbance to or Loss of Special-Status Species and Habitat Fiber optic line installation activities, including ground disturbance and vegetation removal, could result in direct removal or destruction of special-status species, or their habitat, where natural habitats occur within the program area. Because the loss of special-status species or their habitat could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 3.4-1a: Review and Survey for Project-Specific Biological Resources Proponents of individual fiber projects will retain a qualified biologist to conduct a data review and reconnaissance-level survey prior to fiber optic line installation to identify whether any special-status plant or animal species, riparian or other sensitive habitats, sensitive natural community, or wildlife nursery site (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries) could be affected. The data review will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR as well as review of the best available, current data for the area, including vegetation mapping data, CNDDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant Biogeographic Information and Observation System (BIOS) queries, and relevant general and regional plans. If suitable habitat for sensitive biological surveys is present based on the results of the data review and survey, the project proponent will do one of the following:</p> <ul style="list-style-type: none"> ▶ Suitable Habitat Is Present but Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating ground disturbance and will remain in effect throughout the fiber optic line installation: <ul style="list-style-type: none"> ▪ Physically avoid the suitable habitat, including using directional drilling or aerial stringing instead of trenching or plowing, or ▪ Conduct fiber optic line installation outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, or outside of maternity and rearing season at wildlife nursery sites). ▪ Physical avoidance will include establishing environmentally sensitive areas through flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified biologist. 	<p>LTS</p>

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant</p>		<p>S = Significant SU = Significant and unavoidable</p> <p>► Suitable Habitat Cannot Be Avoided. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the mitigation measures below. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. More specific survey requirements and avoidance/minimization measures may be required, as addressed by other mitigation measures.</p> <p>Mitigation Measure 3.4-1b: Develop and Implement a Worker Environmental Awareness Program</p> <p>Proponent of individual fiber projects will require crew members and contractors to receive training from a qualified biologist prior to beginning fiber optic line installation activities. The training will describe the appropriate work practices necessary to effectively implement the biological mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the project area for individual fiber projects; impact minimization procedures; and reporting requirements. The training will instruct workers to allow any wildlife encountered during construction activities to leave the area unharmed and report encounters to a qualified biologist. The qualified biologist will immediately contact CDFW or USFWS, as appropriate, regarding relocation protocol if any wildlife protected by California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own.</p> <p>Mitigation Measure 3.4-1c: Special-Status Plant Surveys, Protection, and Mitigation</p> <p>► If Mitigation Measure 3.4-1a determines that suitable habitat for special-status plant species is present and cannot be avoided, proponents of individual fiber projects will retain a qualified botanist to conduct protocol-level surveys during the appropriate bloom period for special-status plant species with the potential to be affected by fiber optic line installation following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018).</p>	

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<p>LTS = Less than significant PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p>	<ul style="list-style-type: none"> ▶ If special-status plant species are not found, the botanist shall document the findings in a letter report to the proponent and no further mitigation shall be required. ▶ If special-status plant species are found on the project site and are located outside of the proposed trench or plow line, and can be avoided, the proponent shall establish and maintain a buffer around special-status plants to be retained to prevent disturbance to the plants. ▶ Alternatively, if feasible, directional drilling could be used in place of trenching or plowing to avoid direct and indirect impacts to special-status plant species. The directional drilling shall be at a depth and length that completely avoids the seedbank and root zone of special-status plants. ▶ If any state- or federally listed or CNPS List 1 or CNPS List 2 special-status plant species are found that cannot be avoided during construction and directional drilling is not a feasible option, the applicant shall consult with CDFW and/or USFWS, depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur because of project construction and shall implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of off-site populations on mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. A mitigation and monitoring plan shall be developed describing how unavoidable losses of special-status plants shall be compensated. The mitigation and monitoring plan shall be submitted to CDFW and/or USFWS for review and comment. The final mitigation strategy for directly affected plant species shall be determined by the CDFW and the USFWS through the mitigation plan approval process. ▶ For state-listed plants, it may be necessary to obtain an incidental take permit under Fish and Game Code Section 2081. The project proponent shall consult with the CDFW to determine whether a 2081 permit is required and obtain all required authorizations prior to initiation of activities that could affect state-listed plants. ▶ If CNPS List 3 or CNPS List 4 special-status plant species are found that cannot be avoided during construction, Nevada County shall determine if the impacts 	

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<p>LTS = Less than significant PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p>	<p>Mitigation Measure 3.4-1d: Special-Status Wildlife Surveys, Protection, and Mitigation</p> <ul style="list-style-type: none"> ▶ If Mitigation Measure 3.4-1a determines that suitable habitat for special-status wildlife species is present and cannot be avoided, proponents of individual fiber projects will require a qualified biologist to conduct focused or protocol-level surveys for special-status wildlife species with potential to be directly or indirectly affected by fiber optic line installation. This determination will be based on species distribution, known occurrences relative to the project area for individual fiber projects, and the presence of suitable habitat for these species in or near the project area. The survey area will be determined by a qualified biologist based on the species and habitats and any recommended buffer distances in agency protocols. ▶ The qualified biologist will determine if following an established protocol is required, in consultation with the appropriate resource agency. Survey timing and methodology will follow established survey protocols, where protocols are required. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of construction activities that could affect special-status wildlife or their habitat. Focused or protocol surveys for a special-status species with potential to occur in the project area may not be required if presence of the species is assumed. ▶ If protocol surveys determine a special-status species is not present, the qualified biologist shall document the findings in a letter report to the appropriate agency and the proponent and no further mitigation shall be required. ▶ If special-status wildlife species are found on the project site and the species or habitat for the species is located outside of the proposed fiber optic line installation area for trenching or plowing, and can be avoided, and a qualified biologist determines direct and indirect impacts will be negligible, the proponent shall establish and maintain a buffer around special-status species habitat to be retained to prevent disturbance to the species. ▶ If special-status wildlife species or species habitat are found that cannot be avoided during construction, the following will apply: ▶ For species listed as threatened or endangered under ESA or CESA, existing state and federal laws require consultation and take authorization. Potential impacts will be addressed through implementation of project-specific compensatory or other mitigation for any adverse effects on these species as 	

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<p>LTS = Less than significant PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p>	<p>a condition of project approval. Specifically, USFWS and CDFW would not permit a project that would degrade habitat or result in take of a state or federally listed species without compensatory mitigation to offset losses of state or federally listed species and their habitat. Nevada County will require proponents of individual fiber projects to obtain any required take permits prior to project implementation.</p> <p>▶ For other special-status species that have less formal regulatory protection (e.g., CDFW species of special concern), significant impacts would be minimized by modifying the installation method to avoid special-status species by using directional drilling or aerial installation, and through development and implementation of project-specific mitigation measures consistent with applicable state and federal requirements and standards for any significant impacts as a condition of project approval to reduce impacts to less than significant under CEQA. For species for which standard, established mitigation guidance exists (e.g., established by CDFW, USFWS, or NMFS), developed mitigation measures would follow these standards or provide a similar level of protection. These measures could include implementing no-disturbance buffers, limited operating periods for construction and operations, implementing alternative fiber optic line installation methods such as directional drilling, stringing fiber optic line on bridges or power lines, or installing fiber optic line underneath pavement, or compensatory habitat creation, enhancement, or restoration. In the absence of previously established guidance or standards, mitigation would be developed in consultation with the appropriate agencies with jurisdiction over the affected species (e.g., CDFW, USFWS, NMFS).</p> <p>Mitigation Measure 3.4-1e: Avoid Nesting Birds Where possible, vegetation removal and project activities will occur outside of the active nesting bird season as determined by the qualified biologist. However, if work during the nesting season is unavoidable, proponents of individual fiber projects will retain a qualified biologist to conduct surveys for nesting birds within and adjacent to the project area. The area for surveys will be determined by the qualified biologist based on the potential species in the area and presence of suitable habitat. Surveys should be timed no more than 1 week prior to vegetation removal or project activities that could disturb nesting birds. If active nests are detected, the project proponent will establish a temporary buffer around the nest that is sufficient to ensure that breeding is not likely to be disrupted or adversely</p>	

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<p>Impact 3.4-2: Result in Destruction or Adverse Modification of Areas Designated by USFWS as Critical Habitat for Sierra-Nevada Yellow-legged Frog and California Red-legged Frog</p> <p>Fiber optic line installation, including vegetation removal and ground disturbance, may result in the loss or degradation of USFWS designated critical habitat for Sierra Nevada yellow-legged frog and California red-legged frog, if critical habitat occurs within the program area. This would be a potentially significant impact.</p>	<p>PS</p>	<p>affected by construction activities, as determined by a qualified biologist. Factors to be considered for determining buffer size will include the following: presence of natural buffers provided by vegetation or topography, nest height, locations of foraging territory, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Buffers will be maintained until a qualified biologist determines the young have fledged or the nest is no longer active.</p> <p>Mitigation Measure 3.4-2: Avoid or Compensate for Loss of Critical Habitat for Sierra Nevada Yellow-Legged Frog and California Red-Legged Frog</p> <p>Wherever feasible, fiber optic line installation will be designed to avoid construction activities within or adjacent to critical habitat as designated by USFWS. This could include switching installation methods from trenching or plowing to directional drilling or aerial stringing.</p> <p>If avoidance is not feasible, informal consultation with USFWS will determine a mitigation strategy to ensure that construction activities do not result in the destruction and adverse modification of the value of the habitat or affect the survival and recovery of Sierra Nevada yellow-legged frog and California red-legged frog. Measures are likely to include seasonal restrictions, reduced construction corridors, pre-construction surveys, worker environmental education sessions, biological monitoring, and re-vegetation programs.</p>	<p>LTS</p>
<p>Impact 3.4-3: Result in Loss or Degradation of Riparian Habitat and Other Sensitive Natural Communities</p> <p>Fiber optic line installation, including vegetation removal and ground disturbance, may result in the loss or degradation of riparian habitat or other sensitive natural communities, if they occur within the program area. This would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 3.4-3a: Implement Mitigation Measure 3.4-1a.</p> <p>See above.</p> <p>Mitigation Measure 3.4-3b: Obtain All Required Regulatory Authorizations if Project-Specific Fiber Optic Line Installation Would Result in Impacts to Riparian Habitats within CDFW Jurisdiction</p> <p>If it is determined that project-specific fiber optic line installation could affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under Fish and Game Code Section 1602, a Streambed Alteration Notification shall be submitted to CDFW, pursuant to Section 1600 et seq. of the California Fish and Game Code. If proposed activities are determined to be subject to CDFW jurisdiction, the proponents of individual fiber projects shall abide by the conditions of any executed Lake and Streambed Alteration Agreement.</p> <p>Mitigation Measure 3.4-3c: Prevent Spread of Invasive Plants and Noxious Weeds</p> <p>Proponents of individual fiber projects will take the following actions to prevent the spread of invasive plants and noxious weeds:</p>	<p>LTS</p>

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<p>LTS = Less than significant PS = Potentially significant</p>	<p>PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p> <ul style="list-style-type: none"> ▶ identify and map significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys. ▶ clear clothing, footwear, and equipment used during fiber optic line installation of soil, seeds, vegetative matter or other debris or seed-bearing material before entering the project area or when leaving an area with infestations of invasive plants and noxious weeds; ▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the project area from an area with infestations of invasive plants and noxious weeds; ▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for mud or other signs that weed seeds or propagules could be present prior to use in the project area; and ▶ stage equipment in areas free of invasive plant infestations. 	<p>LTS</p>
<p>Impact 3.4-4: Degradation of State or Federally Protected Wetlands and Waters of the United States or Waters of the State</p> <p>Construction activities would avoid direct impacts to wetlands and sensitive aquatic resources, but fiber optic line installation activities would occur adjacent to or underneath (in the case of directional drilling) aquatic resources. Aquatic resources could be indirectly affected by erosion and sedimentation, or by the accidental introduction of oil, fuel, or other pollutants from construction equipment and materials, or by “frac-out” (i.e., the escape of drilling materials or sediment into the environment). This would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 3.4-4a: Implement Mitigation Measure 3.8-1. See below.</p> <p>Mitigation Measure 3.4-4b: Avoid Effects on Aquatic Habitat, Including Wetlands and Waters of the State and the United States</p> <ul style="list-style-type: none"> ▶ Ground disturbing (trenching, plowing, or grading) work within 20 feet of jurisdictional waters of the State or of the United States, and all directional drilling activities under waterways shall be monitored full-time by a County-approved biologist to assure that there is no surface disturbance to jurisdictional waters or impacts to downstream water quality, and to ensure drilling is immediately stopped and the drilling fluid seepage and spill prevention measures are implemented, in the case of a frac-out. CDFW or the Central Valley RWQCB may establish additional conditions to protect waters of the State and water quality, as described in any Lake and Streambed Alteration Agreement, Water Quality Certification, or waste discharge requirements issued for the project. ▶ All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. 	<p>LTS</p>

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<p>Impact 3.4-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries</p> <p>The program area is within identified ECAs or Natural Landscape Blocks. Fiber optic line installation could occur in areas used as wildlife movement corridors or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries). Installation related noise and disturbance could lead to temporary changes in migration or movement patterns. Fiber optic line would be buried or would be installed through aerial stringing and therefore would not create barriers to wildlife long-term. Temporary shifts in wildlife movements to avoid or navigate around fiber optic line installation and associated disturbances would not substantially interfere with movement requirements or migration patterns; and program implementation would not create permanent barriers to local or landscape-level movements. This would be a less-than-significant impact. Installation of fiber optic line through waterways would be accomplished through directional drilling and would avoid direct impacts to aquatic habitat. However, a frac-out could temporarily affect aquatic movement corridors. Installation-related noise and disturbance, and construction activities such as tree and vegetation removal could result in loss or temporary disturbance of wildlife nursery sites if these occur adjacent to roadways. This would be a potentially significant impact.</p>	<p>PS</p>	<p>▶ Hazardous spills shall be cleaned up immediately and the contaminated soil properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.</p> <p>▶ Because fuels, lubricants, and solvents may be stored in staging areas, all staging areas shall be located at least 150 feet away from lakes, streams, drainages, and wetlands.</p> <p>Mitigation Measure 3.4-5a: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</p> <p>Proponents of individual fiber projects will implement the following measures while working in the project area for individual fiber projects that contain nursery sites identified in surveys conducted pursuant to Mitigation Measure 3.4-1a:</p> <p>▶ Retain Known Nursery Sites. A qualified biologist will identify the important habitat features of the wildlife nursery and, prior to construction activities, will mark these features for avoidance and retention during fiber optic line installation.</p> <p>▶ Establish Avoidance Buffers. The proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, the potentially affected species, and other factors. No construction activity will commence within the buffer area until a qualified biologist confirms that the nursery site is no longer active/occupied. Monitoring of the nursery site by a qualified biological monitor during and after construction activities will be required if a qualified biologist determines that proposed activities could disrupt use of active nursery sites. If construction activities cause agitated behavior of the individual(s), the buffer distance will be increased, or construction activities modified until the agitated behavior stops.</p> <p>Mitigation Measure 3.4-5b: Implement Mitigation Measure 3.8-1.</p> <p>See below.</p>	<p>LTS</p>
<p>Impact 3.4-6: Potential Conflict with Local Policies or Ordinances</p> <p>Fiber optic line installation could conflict with local policies or ordinances protecting biological resources, such as local tree preservation policies, standards, and ordinances. Following the restrictions and mitigations required in</p>	<p>PS</p>	<p>Mitigation Measure 3.4-6: Prepare a Biological Inventory and Avoid or Compensate for Loss of Landmark or Heritage Trees or Groves</p> <p>If an individual fiber project requires tree removal, a qualified arborist will prepare a Biological Inventory that details the species and DBH of all trees subject to possible</p>	<p>LTS</p>

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant</p> <p>Chapter 12.36 of the City of Grass Valley code, Chapter 18.01 of the Nevada City code, and Section 18.30.155 of the Town of Truckee code would avoid significant impacts related to tree removal. Tree removal associated with the program within Nevada County could conflict with Section L-II 4.3.15, Tree Resource Protection Standards, in Title 3 of the County Land Use and Development Code. This would be a potentially significant impact.</p>	<p>S = Significant SU = Significant and unavoidable</p> <p>tree removal and will identify any landmark and heritage trees and groves. If landmark and heritage trees or groves are identified and can be avoided, no further mitigation is required.</p> <p>Prior to approval of a site plan, grading plan, or any permit authorizing construction, the project proponent shall prepare a Management Plan as required under the Nevada County Tree Resource Protection Standards. The Management Plan shall specify measures to mitigate for the loss of defined trees and groves to ensure no net loss of oak or hardwood habitat, and emphasis will be placed on protection of blue oaks (<i>Quercus douglasii</i>) and valley oaks (<i>Quercus lobata</i>). Measures could include preservation of on-site oak woodlands in a conservation easement, purchase and preservation of off-site oak woodlands, on- or off-site enhancement of degraded oak woodlands, or by paying in-lieu fees into a County-approved fund used to purchase and preserve comparable oak woodland or hardwood communities in the region. The Management Plan shall also include measures to protect trees during construction and following fiber optic line installation. Measures could include specifications for protective fencing and construction buffers, or fiber optic line installation method changes. The plan shall identify financial responsibility and funding sources for all measures.</p>		
<p>3.5 Geology, Soils, and Mineral Resources</p>			
<p>Impact 3.5-4: Result in the Loss of a Unique Paleontological Resource or Unique Geological Feature</p> <p>Paleontological resources and unique geological features exist in Nevada County. Unique geological features are generally aboveground and therefore would not be affected by the program. Because individual fiber projects would primarily be implemented in disturbed road shoulders and only in very limited areas of bedrock, and because of the limited paleontological bearing formations in Nevada County as well as the small diameter of the conduit to be installed, impacts to paleontological resources would be minimized. Nevertheless, unique paleontological resources could be damaged or destroyed during construction. Mitigation Measure 3.5-4 requires a site-specific paleontological resource assessment and moving facilities aboveground if any paleontological resources could be affected. The impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 3.5-4: Perform a Site-Specific Paleontological Resources Inventory Assessment by Rock Unit and if Paleontological Resources Could be Affected, Install Fiber Optic Line Aboveground</p> <p>Before submitting a grading permit application that would include boring through bedrock, the applicant for an individual fiber project shall retain the services of a qualified professional paleontologist who shall prepare a paleontological resources inventory and assessment for any affected rock units. This report shall include the following components:</p> <ul style="list-style-type: none"> ▶ A report of any fossils observed during a reconnaissance-level field survey. ▶ The results of a records search of appropriate paleontological databases (at a minimum, the database at the University of California, Berkeley Museum of Paleontology) to determine whether any previously recorded fossil localities are located within or immediately adjacent to the fiber optic facilities where rock boring is proposed. 	<p>LTS</p>

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant</p>	<p>PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p> <p>► A determination as to whether the geologic formations are of high or low paleontological sensitivity, and a discussion supporting the reasons why the sensitivity determinations were made.</p> <p>If the rock formation is determined to be of high paleontological sensitivity, the fiber optic infrastructure will be designed to be installed aboveground. Prior to issuance of grading permits that would allow for boring in bedrock, the approving local jurisdiction will review the report and findings to confirm no paleontological resources would be affected.</p>	
<p>3.7 Hazards and Hazardous Materials</p>			
<p>Impact 3.7-2: Cause Reasonably Foreseeable Upset and/or Accident Conditions or Be Located on a Hazardous Waste Site</p> <p>Because numerous hazardous waste sites are present along roadways within the program area, contaminated soil or groundwater may be encountered during excavation activities for fiber optic line installation. Other contaminants associated with historic land uses, such as aerially deposited lead, organochlorinated pesticides, and mine waste, may be present in soils where fiber optic line installation would occur. If released to the environment, hazards to people or the environment would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 3.7-2: Conduct Soil and Groundwater Sampling and Testing if Contamination is Suspected</p> <p>Soil sampling shall be conducted in the project footprint before construction begins on or adjacent to hazardous waste sites identified on DTSC- and SWRCB-maintained databases of known contaminated sites. Soil information shall be provided to construction crews to inform them about soil conditions and potential hazards.</p> <p>If hazardous substances are unexpectedly encountered during trenching, grading, or excavating work, work shall be stopped until the material is properly characterized and appropriate measures are taken to protect human health and the environment. If excavation of soil contaminated with hazardous materials is required, the materials shall be handled, transported, and disposed of in accordance with federal, state, and local regulations.</p> <p>If suspected contaminated groundwater is encountered in the construction areas, samples shall be collected and submitted for analysis of petroleum hydrocarbons, metals, volatile organic compounds, and semivolatile organic compounds. If necessary, groundwater shall be collected during construction, contained, and disposed of in accordance with federal, state, and local regulations.</p>	<p>LTS</p>
<p>Impact 3.7-3: Emit or Handle Hazardous Materials, Substances, or Waste Within One-Quarter Mile of an Existing or Proposed School</p> <p>Schools may be located within one-quarter mile of individual fiber project construction activities. While unlikely, fiber installation projects could result in accidental spills of fuel or oil, or expose contaminated soil or groundwater within one-quarter mile of an existing or proposed school. This impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 3.7-3: Implement Mitigation Measure 3.7-2.</p> <p>See above.</p>	<p>LTS</p>

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant PS = Potentially significant</p> <p>Impact 3.7-6: Expose People or Structures, Either Directly or Indirectly, to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires</p> <p>Installation of new fiber optic cable would involve activities that could result in a temporary increase in risk for wildfires by increasing sources of ignition through use of vehicles and equipment in the vicinity of dry fuel and from certain worker behaviors. This, in turn, could increase the risk of exposing project occupants and structures to a significant risk of loss, injury, or death involving wildland fires. Operation of the new fiber optic lines would involve minimal maintenance and the lines are not a source of heat or combustion. Therefore, they would not increase the risk of wildland fires in the area. While the potential may be remote, wildfire resulting from construction activities or worker behavior would be potentially significant.</p>	<p>PS</p>	<p>S = Significant SU = Significant and unavoidable</p> <p>Mitigation Measure 3.7-6: Fire Prevention and Cessation</p> <p>The construction contractors for individual fiber projects shall implement the following measures for all construction activities to prevent and address wildfires:</p> <ul style="list-style-type: none"> ▶ Train and brief all construction workers on fire prevention and suppression methods, including requirements for carrying emergency fire suppression equipment on the project site. ▶ Construction “tailgate meetings” shall be held daily, prior to construction and cover the following topics: fire safety, smoking restrictions, idling vehicles, and restricting construction during red flag warnings. ▶ No construction work will occur during times of high fire threat, and if conditions change after commencing construction, work will cease in periods of extreme fire danger, such as red flag warnings issued by the National Weather Service or other severe fire weather conditions as identified by Nevada County. 	<p>LTS</p>
<p>3.8 Hydrology and Water Quality</p>			
<p>Impact 3.8-1: Violate any Water Quality Standards, Waste Discharge Requirements, Water Quality Control Plan or Otherwise Substantially Degrade Surface or Groundwater Quality</p> <p>Implementation of the proposed program would disturb soil during construction increasing the potential for erosion that could degrade surface or groundwater quality. Construction equipment has the potential to leak gasoline, diesel fuel, engine oil, and hydraulic fluid that could affect surface and groundwater quality. Additionally, drilling fluids could seep or spill into nearby water bodies, which could affect ground and surface water quality. Surface water and groundwater resources vary throughout the county. Due to the shallow nature of the broadband conduit, groundwater would not likely be affected by the program. The program would not require work in any wetlands or Waters of the US or State. With adherence to the NPDES Construction General Permit and all Town, City, and County codes, the program would not cause substantial erosion or adversely affect water quality from fluids from construction equipment. Though unlikely, the use of drilling fluids during directional boring beneath streams could result in frac-out, or the seepage of drilling fluid from the boring into the surface water. This impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 3.8-1: Implement Drilling Fluid Seepage and Spill Prevention Measures</p> <p>Drilling fluid containment and cleanup equipment (e.g., certified weed-free bales, silt fencing, and portable pumps) will be present for use in the work area where there is a potential for frac-out or spills of drilling fluid. BMPs will be installed between the bore site and any flowing stream or wetland to prevent the mixture from entering the stream or wetland. Spill areas will be restored to pre-spill conditions, as practicable, and spill documentation and reporting will be carried out.</p> <p>Portable pumps will be kept on-site to control seepage to the surface and to prevent the mixture from entering streams or wetlands. If the mixture seeps to the surface in the stream or wetland channel, a pump will be used to pump it back to the drill site. If a release occurs at a high-risk boring location, the stream flow will be immediately dammed and flumed, and the bentonite will be contained and removed.</p> <p>At locations where boring is taking place adjacent to streams or wetlands, clamping and flume materials will be pre-staged. During directional boring activities near streams or wetlands, construction crews will visually monitor bentonite flow and returns so that fluid loss can be identified before the material surfaces in the stream channel and promptly stop work if there is a detection of any bentonite or construction material release. If a spill is detected in a flowing channel,</p>	<p>LTS</p>

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<p>3.9 Noise</p> <p>Impact 3.9-1: Exposure of Persons to or Generation of Excessive Construction Noise The program would generate temporary, intermittent construction noise as individual fiber projects are implemented. Construction noise is exempt from noise standards for projects located within unincorporated Nevada County and the Town of Truckee. Construction equipment could reach a noise level of 83 dB L_{eq} at 50 feet; thus, construction activity would not exceed Nevada City's construction noise standard of 90 dB within 50 feet. However, construction equipment operation would surpass 90 dB within 23 feet of construction. Similarly, individual fiber projects located in the City of Grass Valley could exceed the daytime noise standard for residential uses of 55 dB L_{eq} if construction were to occur within 1,269 feet of sensitive receptors. Because individual fiber project information is not known at this time, it is unknown whether individual projects would be located farther than 1,269 feet or 23 feet from sensitive receptors in the City of Grass Valley and Nevada City, respectively. In any case, construction activities along any given roadway or fiber route would be temporary and would not require any stationary noise equipment. Notwithstanding, construction activities in the vicinity of sensitive receptors could generate noise levels that cause discomfort or annoyance throughout the program area. Therefore, the impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 3.9-1: Implement Measures to Reduce Exposure to Construction Noise The construction contractors for individual fiber projects shall comply with the following measures for all construction activity to take place within 1,269 feet of noise sensitive receptors in the City of Grass Valley, Nevada County, and/or Town of Truckee and that are anticipated to generate exterior noise levels above 55 dB L_{eq} or that are within 23 feet of noise sensitive receptors in Nevada City:</p> <ul style="list-style-type: none"> ▶ Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. ▶ Locate noise generating equipment as far as possible from noise-sensitive uses when noise-sensitive uses adjoin or are near a construction project area. ▶ Use "quiet" air compressors and other stationary noise-generating equipment where appropriate technology exists. ▶ The project sponsor shall designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler) and will require that reasonable measures warranted to correct the problem be implemented. The project sponsor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the project site and send a notice to neighbors in the project vicinity with information on the construction schedule and the telephone number for noise complaints. ▶ Install temporary noise curtains as close as possible to the noise-generating activity such that the curtains obstruct the direct line of sight between the noise-generating construction activity and the nearby sensitive receptors. Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with 	<p>LTS</p>

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>LTS = Less than significant</p>	<p>PS = Potentially significant</p>	<p>S = Significant SU = Significant and unavoidable</p> <ul style="list-style-type: none"> ▶ a surface weight of at least 1 pound per square foot. ▶ Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). ▶ Operate heavy-duty construction equipment at the lowest operating power possible. ▶ Provide a minimum of 1 week of advance notice to owners of all residential located within 1,300 feet of where construction activity would take place. This noticing shall inform the recipients of when and where construction would occur and the types of measures being implemented to lessen the impact at potentially affected receptors. This noticing shall also provide the contact information for the designated disturbance coordinator. 	

Source: Compiled by Ascent Environmental in 2022.