PUBLIC REVIEW DRAFT



Initial Study/Mitigated Negative Declaration San Bernardino Class 1 Bike Trail Project (CIP 95117 / 36107017) South Lake Tahoe, CA

March 20, 2020



▲ Contents

1.0	IN	FRODUCTION	. 1
	1.1	Initial Study/Initial Environmental Checklist	1
		1.1.1 County of El Dorado – CEQA Lead Agency	
		1.1.2 Tahoe Regional Planning Agency - Tahoe Regional Planning Compact Lead	
		Agency	
	1.2	Project Title	3
	1.3	Lead Agency	
	1.4	Contact Person and Phone Number	
	1.5	Project Location	
	1.6	Project Sponsor's Name and Address	
	1.7	General Plan Designation/Zoning	
	1.8	Summary of Project	
	1.9	Surrounding Land Uses and Setting	
	1.10	Other Public Agencies Whose Approval Is Required	
		1.10.1 Project Approvals	
		1.10.2 Other Potential Project Approvals	
	1.11	Public Review	
	1.12	Further Information	
	1.13	Acronyms and Abbreviations	8
~ ~			40
2.0	PR	OJECT DESCRIPTION	
	2.1	Project Background	
	2.2	Public Involvement	
	2.3	Future Environmental Process and Review	
	2.4	Project Purpose	
		Project Goals and Objectives	
	2.5	Project Area	
	2.6	Project Description	
		2.6.1 Class 1 Trail Alignment Description	
		Asphalt Trail	
		Bridge Boardwalk	
		Drainage/Slope Protection	
		Tree Removal and Protection	
		Construction Dewatering.	
		2.6.2 Class 3 Bike Route Alignment Description	
		Signage and Striping	
		2.6.3 Construction Regulatory Compliance Measures and Best Management	
		Practices	
		Staging	
		Regulatory Compliance Measures and Best Management Practices	21
	2.7	Project Implementation Schedule	
	2.8	Operations, Management and Maintenance Strategy	26
3.0	EN	VIRONMENTAL CHECKLIST AND IMPACT ANALYSIS	27
	3.1	Environmental Factors Potentially Affected	27
	3.2	CEQA Enviromental Determination	28
	3.3	TRPA Environmental Determination (to be completed by TRPA)	29
	3.4	Evaluation of Environmental Impacts	30
		3.4.1 CEQA	
		3.4.2 TRPA	30

	3.4.3 Aesthetics (CEQA), Scenic Resources/Community Design and Light and	00
	Glare (TRPA)	
	3.4.4 Agriculture and Forestry Resources	
	3.4.5 Air Quality	.43
	3.4.6 Biological Resources (Stream Environment Zones, Wetlands, Wildlife and Vegetation)	. 50
	3.4.7 Cultural Resources (CEQA) and Archaeological/Historical (TRPA)	
	3.4.8 Energy (CEQA/TRPA)	
	3.4.9 Geology and Soils (CEQA) and Land (TRPA)	
	3.4.10 Greenhouse Gas Emissions (CEQA) and Air Quality (TRPA)	
	3.4.11 Hazards and Hazardous Materials (CEQA) and Risk of Upset and	
	Human Health (TRPA)	101
	3.4.12 Hydrology and Water Quality	
	3.4.13 Land Use and Planning	
	3.4.14 Mineral Resources (CEQA) and Natural Resources (TRPA)	
	3.4.15 Noise	
	3.4.16 Population and Housing	
	3.4.17 Public Services	
	3.4.18 Recreation	
	3.4.19 Transportation (CEQA) and Traffic and Circulation (TRPA)	
	3.4.20 Tribal Cultural Resources (CEQA) and Archaeological/Historical (TRPA)	
	3.4.21 Utilities and Service Systems (CEQA) and Utilities (TRPA)	
	3.4.22 Wildfire (CEQA)	
0.5	3.4.23 Mandatory Findings of Significance	
3.5	Certification [TRPA only]	
3.6	Preparers	
3.7	References	178

APPENDICES

1.0 INTRODUCTION

This Initial Study (IS) and Initial Environmental Checklist (IEC) identifies and assesses the anticipated environmental impacts of the San Bernardino Class 1 Bike Trail Project (Project), the proposed project.

1.1 INITIAL STUDY/INITIAL ENVIRONMENTAL CHECKLIST

This Initial Study/Initial Environmental Checklist (IS/IEC) has been prepared to address the potential environmental effects of the San Bernardino Class 1 Bike Trail Project, located in El Dorado County, California. An Initial Study is a preliminary environmental analysis that is used by the California Environmental Quality Act (CEQA) lead agency as a basis for determining whether an Environmental Impact Report (EIR), a Mitigated Negative Declaration, or a Negative Declaration is required for a project pursuant to the CEQA Guidelines. An Initial Environmental Impact Statement (EIS), a Mitigated Finding of No Significant Effect (FONSE), or a Finding of No Significant Effect is required for a project under Tahoe Regional Planning Agency (TRPA) Rules of Procedure.

The IS/IEC contains a project description, description of environmental setting, identification and explanation of environmental effects, discussion of mitigation for potentially significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the names of persons who prepared the study.

The IS has been prepared pursuant to the CEQA of 1970, Cal. Pub. Res. Code §2100 et seq. El Dorado County is the CEQA lead agency for this project as described below. The IEC has been prepared pursuant to the requirements of Article VI of the TRPA Rules of Procedures and Chapter 3 of TRPA's Code of Ordinances. TRPA serves as lead agency pursuant to its own regulations as described below.

1.1.1 County of El Dorado – CEQA Lead Agency

The County of El Dorado (County) is the lead agency under provisions of CEQA. CEQA requires that state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. This IS, prepared in accordance with the CEQA Statutes (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Administrative Code Section 15000 et seq.), presents sufficient information to allow the County to determine whether the Project may have a significant effect on the environment. If the County finds substantial evidence that any aspect of the Project, either individually or cumulatively, may have a significant and unavoidable effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the County must prepare an EIR. If the County finds no substantial evidence that the Project or any of its aspects may cause a significant effect on the environment, a Negative Declaration (ND) may be prepared. If in the course of analysis, the County recognizes that the Project may have a significant effect, a Mitigated Negative Declaration (MND) may be prepared.

The IS also provides sufficient information for Responsible and Trustee Agencies to use as the basis for CEQA compliance, such as the California Regional Water Quality Control Board – Lahontan Region (Lahontan), California Department of Fish and Wildlife (CDFW), California Department of Transportation (Caltrans), Tahoe Paradise Recreation and Park District (Tahoe Paradise Park), and California Department of Forestry and Fire Protection (Calfire). The IS is not, in and of itself, a decision

document. The document's purpose is to evaluate the environmental consequences of implementing the Project and to identify measures if necessary to avoid significant impacts.

Although the lead agency must consider the information in the IS, the document's conclusions do not dictate the lead agency's discretion to approve or disapprove the project. The decision making document is the MND that records the agency's decision and is also circulated for public review. The minimum content requirements for an MND are:

- Description and title of the Project;
- Location of the Project, preferably shown on a map;
- Name of the Project Applicant;
- A proposed finding that the Project will not have a significant effect on the environment;
- An attached copy of the Initial Study documenting reasons to support the finding; and
- Mitigation measures, if any, included in the Project to avoid potentially significant effects.

The County will file the MND at the County Clerk's office and publish a Notice of Intent to Adopt a (Mitigated) Negative Declaration for a 30 day review period to accept comments on the environmental document. Whereas there are state level Trustee and Responsible Agencies reviewing this project, the State Clearinghouse (SCH) also circulates the environmental documentation for agency review and requests a completed Notice of Completion (NOC) form to be submitted with the 15 copies of the draft MND. This form facilitates the processing of environmental documents and is circulated to state agencies together with the MND. The information from the NOC form is entered into the SCH database. The normal review period for a MND submitted to the SCH is 30 calendar days (see CEQA Guidelines, Section 15105). Comments are forwarded to the SCH prior to the end of the assigned review period. At the end of the state review period, comments from the reviewing state agencies are collected at the SCH. A closing letter and a complete package of comments are forwarded to the Lead Agency on the day following the close of the review period.

The Project must comply with Clean Water Act (CWA) Section 401 Water Quality Certification (if impacts to delineated wetlands or waters will occur) and CWA Section 402 National Pollutant Discharge Elimination System (NPDES) construction permits issued by Lahontan. CDFW may require issuance of a Streambed Alteration Agreement for the Upper Truckee River bridge span depending on the final design of the bridge. El Dorado County issues an encroachment permit for the portion of the Project crossing the street right-of-way (ROWs). The United States Army Corps of Engineers (USACE) reviews the preliminary wetland delineation and will determine whether the Project requires a jurisdictional determination.

The County does not issue any permits during environmental analysis or as part of the request to have the County Board of Supervisors approve environmental documentation. Assuming the environmental documentation is approved by the County along with approval of the Project, design review of the Project by the County's Design Review Committee will occur, followed by pursuit of various permits and approvals for construction from respective agencies such as El Dorado County, Caltrans, TRPA and Lahontan. Within five working days of approving a project for which an MND has been adopted, the County must file a Notice of Determination (NOD). The filing of the NOD begins a 30-calendar-day statute of limitations on court challenges to the project approval under CEQA.

1.1.2 Tahoe Regional Planning Agency – Tahoe Regional Planning Compact Lead Agency

The project area is entirely located in the Lake Tahoe Basin and is therefore under the jurisdiction of the TRPA. TRPA is the lead agency under the Tahoe Regional Planning Compact (TRPC, PL 96-551 94 Statute 3233). As such, this IEC is prepared in accordance with Article VII of the TRPC, TRPA revised

Code Section 3.3, specifically Subsection 3.3.2, and Article VI of the TRPA Rules of Procedure. The responsible body for the TRPA is the Governing Board. The Governing Board's decisions involve adopting a FONSE, ensuring consistency of the Project with the TRPA Regional Plan and Environmental Threshold Carrying Capacities and approving the linear public service permit for the Project.

TRPA utilizes an IEC, which is used to determine whether an EIS shall be prepared for a project. The IEC provides information identifying the environmental effects of the project. The IEC includes:

- An identification of the environmental effects;
- A discussion of proposed mitigation for significant adverse effects, if any;
- The name of the person who prepared the responses; and
- Supporting data or evidence to support the responses.

1.2 PROJECT TITLE

The San Bernardino Class 1 Trail Project (Project) serves as the project title for the proposed project.

1.3 LEAD AGENCY

The County (CEQA) and TRPA (TRPA Rules of Procedure) serve as joint lead agencies for the Project.

1.4 CONTACT PERSON AND PHONE NUMBER

Donaldo Palaroan, P.E., Senior Civil Engineer, County of El Dorado, Department of Transportation, is the project manager for the Project. His contact information is: <u>donaldo.palaroan@edcgov.us</u> and (530) 573-7920

1.5 **PROJECT LOCATION**

The Project is located entirely within eastern El Dorado County, California, specifically near the unincorporated community of Meyers (Figure 1-1). The Project corridor begins at the eastern terminus of West San Bernardino Avenue at North Upper Truckee Road, and follows West San Bernardino Avenue to its end on USFS property. At this point the roadway pavement ends and a locked gate is in place to prevent public vehicle access to the dirt utility road. From there, the corridor follows an unpaved dirt utility road located on either side of the Upper Truckee River to the paved parking lot and roadways of Tahoe Paradise Park (Park) and along East San Bernardino Avenue to just east of the intersection with Apache Avenue. Land ownership within the project area includes El Dorado County right-of-way along West and East San Bernardino Avenues, Tahoe Paradise Park, and USFS National Forest System (NFS) lands.

In addition to roadway right-of-way of West and East San Bernardino Avenues, the Project is included within El Dorado County Assessor's Parcel Numbers (APNs) that include: 034010022, 034-010013, 034020017, 034020014, and 034020012.

The topography of the Park and adjacent NFS lands lends itself to many types of outdoor recreation on a year-round basis. The Project is situated on land that ranges from flat to hilly and is not easily seen from offsite locations. Within the project area, development of public roadways, recreational trails and infrastructure at the Park, as well as the creation of informal trails along the Upper Truckee River, has occurred gradually since the Park's inception in 1965. NFS lands managed by the LTBMU surround a majority of the Park and also include sections of the Upper Truckee River.

The Upper Truckee River is located within the western boundary of the Park and is accessed by an informal trail network on both the Park side (east) and NFS (west) side of the river. The Upper Truckee River is located in the Upper Truckee hydrologic area, the largest watershed in the Lake Tahoe Basin. The Upper Truckee River the only river tributary to Lake Tahoe. The banks of the Upper Truckee River exhibit destabilization of the stream corridor, displaying erosion and contribute significant amounts of sedimentation into the river. These areas are publicly accessible and used for passive recreation.

Project area sections to the west and east of the Park are located within the Santini-Burton/Urban Forest Parcels Management Area as defined in the LTBMU Land Management Plan. The management emphasis within this management area is on protecting watershed conditions and community open space. Urban Forest Parcels provide opportunity for dispersed recreation within the urban setting, such as walking/hiking, wildlife viewing, cross-country skiing, and access to streams and lakes. When appropriate, recreational improvements such as system trails and shared-use pathways may occur on urban forest parcels.

Finally, the remainder of the project area and the locations of proposed improvements are located within road right of way managed by El Dorado County. East San Bernardino Avenue provides access to the Park and includes Class 3 bike route pavement markings and signage improvements. West San Bernardino Avenue provides access to the Class 1 shared-use pathway on the west side of the Upper Truckee River and will also include new Class 3 bike route pavement markings and signage. Both East and West San Bernardino Avenues are residential streets, with single family homes located on both sides of these streets. Overhead utility lines are present along both streets for the duration of the Class 3 Bike Route; however, no sidewalks or curb and gutter are developed along these roads.

1.6 PROJECT SPONSOR'S NAME AND ADDRESS

County of El Dorado, Department of Transportation 924 B Emerald Bay Road South Lake Tahoe, CA 96150

1.7 GENERAL PLAN DESIGNATION/ZONING

Applicable regional general plans and county general plans include the TRPA Regional Plan for the Lake Tahoe Basin and County of El Dorado General Plan. The Class 1 portion of the Project is located within the Meyers Community Plan, crossing land designated as Conservation and zoned Upper Truckee River Corridor – MAP 5, and designated as Recreation and zoned Meyers Recreation – MAP-4. According to the Community Plan, non-motorized public trails are a permitted use in both zones. These lands are also within TRPA Plan Area Statement (PAS) 119 – Country Club Meadows and designated as Recreation.

TRPA Plan Area Statements (PAS) provide a description of land use for a plan area, identify planning issues, and establish specific direction for planning policy for regional goals and policies. The Class 3 portions of the Project are located within PAS 133 Tahoe Paradise-Upper Truckee (West San Bernardino Avenue) and PAS 124 - Meyers Residential (East San Bernardino Avenue). Both PAS 133 and PAS 124 have a Land Use Classification of Residential, with a "Mitigation" Management Strategy. The Planning Statement for PAS 124 states, "The area should continue to be residential, maintaining the existing character of the neighborhood." The Planning Statement for PAS 133 and 124, trails are an allowed use and transportation routes are a special use. The County adopted TRPA's PAS, which act as a zoning equivalent in the Lake Tahoe Basin.

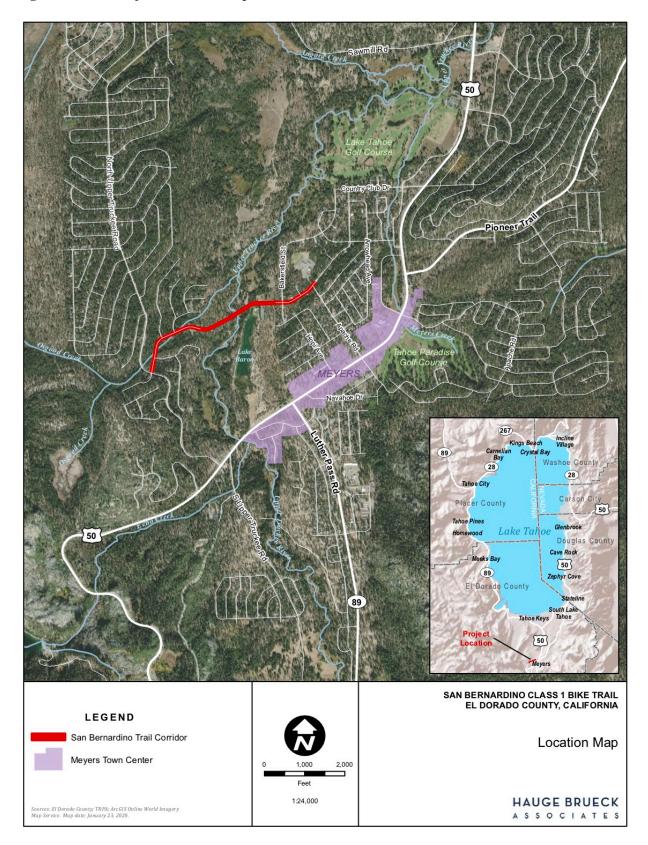


Figure 1-1 Project Location Map

1.8 SUMMARY OF PROJECT

The San Bernardino Class 1 Bike Trail Project is proposed on publicly owned lands in the unincorporated community of Meyers, California in El Dorado County. Pathway and drainage improvements are proposed within the County-maintained rights of way of East and West San Bernardino Avenues, within the Tahoe Paradise Park boundary, and on National Forest System (NFS) lands managed by the USDA Forest Service Lake Tahoe Basin Management Unit (LTBMU). A site plan map and Class 1 Bike Trail (e.g., shared-use pathway) and Class 3 Bike Route details are included in Appendix A. The 0.7 mile Class 3 Bike Route is limited to the existing paved areas of West and East San Bernardino Avenues and includes pavement striping and route signage. The 0.24 mile of Class 1 Bike Trail would be constructed over an existing dirt utility road between West and East San Bernardino Avenues and the Park paved parking lot and access road. The Class 1 Trail would consist of a paved travelway, a bridge crossing of the Upper Truckee River, and a boardwalk travelway at each approach to the bridge.

Trail development details comply with the American Association of State Highway and Transportation Officials (AASHTO) guidelines and American Disability Act (ADA) design standards.

1.9 SURROUNDING LAND USES AND SETTING

The Project's Class 1 Bike Trail alignment will be contained within a 25-foot wide construction corridor through undeveloped USFS property, over the Upper Truckee River, and through Tahoe Paradise Park property. The Class 3 Bike Route will be located within the existing pavement of West and East San Bernardino Avenues from North Upper Truckee Road to Apache Avenue. Existing land uses include residential neighborhoods along these roadways and recreational uses through the undeveloped USFS Santini-Burton lands and Park. Mature vegetation is present along the alignment in clusters and wetland vegetation species are present along the trail alignment, particularly in the vicinity of the Upper Truckee River. Existing roads and trails currently provide public access for dispersed recreational activities such as hiking and cycling in the Project area.

Beyond the immediate vicinity of the Project, the new trail/route would connect the subdivisions along North Upper Truckee Road to the Lake Valley State Recreation Area (Washoe Meadows) and the Lake Tahoe Golf Course located north of the Project alignment. An existing County pathway network is located in those areas, thereby increasing the overall connectivity in the broader Project area. The Lake Tahoe Environmental Science Magnet School is located within 200 feet of the terminus of the Class 3 portion of the Project at Apache Avenue. The Project would also connect to Lake Baron, the commercial center within Meyers, and Tahoe Paradise Golf Course, located south of the Project alignment. U.S. 50 and State Route 89 are located roughly 2,000 feet (0.4 mile) south of the Project. An existing Class 1 Bike Trail is located along U.S. 50, Sawmill Road, and parallel to Lake Tahoe Boulevard connecting Meyers to the City of South Lake Tahoe. There are also existing Class 2 trails along North Upper Truckee Road, a portion of Lake Tahoe Boulevard, Pioneer Trail, and Apache Avenue.

1.10 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

1.10.1 Project Approvals

The Project will require approval from the following public agencies:

1.10.1.1 United States Forest Service

The project area contains lands managed by the United States Forest Service Lake Tahoe Basin Management Unit (LTBMU) and therefore requires Forest Service review under the National Environmental Policy Act and a decision by the LTBMU supervisor on a Special Use Permit or land easement. Approximately 78 percent of the area around Lake Tahoe is public land managed by the LTBMU. Totaling over 154,851 acres, this land includes beaches, hiking and biking trails, wilderness, historic estates and developed recreation areas such as campgrounds and riding stables.

1.10.1.2 Tahoe Paradise Recreation and Park District – CEQA Responsible Agency

The Project is located within Tahoe Paradise Recreation and Park District (Tahoe Paradise Park or Park) property and as such, will require Board of Director decision on right of way dedication or land easement. The Park was founded under state law in 1965, by resolution of El Dorado County Board of Supervisors and by approval of the voters of the district. The Board of Directors was formed as a part of the original resolution, allowing for 5 board members, consisting of 4 members residing and elected from within the district and the 5th being the Supervisor in "the area which represents the district" - District V. The Board has the power to conduct all proceedings provided within the law for financing the cost of acquiring, constructing, extending, improving repairing, maintaining, operating and regulating any of the public improvements and to exercise any of the other powers in the law.

1.10.1.3 California Regional Water Quality Control Board (Lahontan) – CEQA Responsible Agency

Lahontan has a responsible agency role in the physical development of the Project (the issuance of waste discharge requirements that may be discharge standards, Total Maximum Daily Loads (TMDL) for Upper Truckee River or CWA Section 402 National Pollutant Discharge Elimination System construction permits). Lahontan has responsibility for water quality regulation in an area that covers a large portion of the eastern side of California and includes the Tahoe Basin and the Truckee River watersheds. This agency establishes non-point and effluent water quality standards, subject to approval by the State Board. By issuing waste discharge permits and requiring monitoring to show compliance, as well as other actions, Lahontan actively enforces attainment of standards. Lahontan must also certify US Army Corps of Engineers permits granted under Section 404 of the Clean Water Act. Additionally, any new development or disturbance affecting SEZs within the Lake Tahoe Basin would require exemption findings by Lahontan and may require a water quality certification.

1.10.2 Other Potential Project Approvals

The Project may require approval from the following public agencies:

- Caltrans Funding
- Lahontan CWA Section 401 Water Quality Certification
- USACE CWA Section 404 Dredge and Fill Permit
- CDFW Streambed Alteration Agreement
- South Tahoe Public Utility District (STPUD) Design assistance for construction over or near sewer lines, especially at the river crossing sheet metal wall protecting the line within the river.
- Tahoe Metropolitan Planning Organization (TMPO) and Tahoe Transportation District (TTD) Funding

• Calfire

As identification of project funding sources occurs, additional agencies may base decisions on this environmental documentation.

1.11 PUBLIC REVIEW

A formal public review of the San Bernardino Class 1 Trail Project IS/IEC is accomplished with the circulation of this document, responses to comments received on this document, and through public hearings held to consider approval of the Project.

The Draft IS/IEC will be circulated for public and agency review from March 20, 2020 to April 20, 2020. An electronic copy of the documents can be downloaded from the County's website at the following address: https://www.edcgov.us/government/dot/pages/CEQA.aspx.

Paper copies of the document are available for review at the following locations during business hours:

El Dorado County, Department of Transportation office (address below)

El Dorado County Library at 1000 Rufus Allen Boulevard, South Lake Tahoe, CA 96150

Comments on this document must be received by 11:59 p.m. on April 20, 2020. Written comments may be sent by postal, electronic mail or fax to:

Donaldo Palaroan, Senior Civil Engineer El Dorado County Community Development Services 924 B Emerald Bay Road, South Lake Tahoe, CA 96150 Email: <u>donaldo.palaroan@edcgov.us</u> Phone: (530) 573-7920 Fax (530) 541-7049

1.12 FURTHER INFORMATION

If you have further questions or require additional information regarding this matter, please contact Donaldo Palaroan, Senior Civil Engineer. His contact information is: <u>donaldo.palaroan@edcgov.us</u> and (530) 573-7920

1.13 ACRONYMS AND ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
AB 32	California Global Warming Solutions Act of 2006
ACHP	Advisory Council on Historic Preservation
ADA	American Disability Act
APCDs	Air Pollution Control Districts
AP	Area Plan
APE	Area-of-potential effect
APN	Assessor parcel number

AQMD	Air Quality Management District	
ARMR Archaeological Resources Management Reports		
Basin Plan	asin Plan Water Quality Control Plan Report for the North Lahontan Basin	
bgs Below Ground Surface		
BMP	Best Management Practice	
BPMP	Lake Tahoe Regional Bike and Pedestrian Master Plan	
BSA	Biological Study Area	
CAA	Federal Clean Air Act of 1970	
CAAA	1990 Clean Air Act Amendments	
CAAQS	California Ambient Air Quality Standards	
Cal-EPA	California Environmental Protection Agency	
Cal-OSHA	California Occupational Safety and Health Administration	
CalEEMod	California Emissions Estimator Model	
CalEPA	California Environmental Protection Agency	
Cal-SHPO	California State Historic Preservation Officer	
Caltrans	California Department of Transportation	
CARB	California Air Resources Board	
CBC	California Building Code	
CCAA	California Clean Air Act	
CCIC	Central California Information Center	
CDF	California Department of Forestry	
CDFW California Department of Fish and Wildlife		
CDPR California Department of Parks and Recreation		
CE NEPA Categorical Exclusion		
CEQA		
CESA	California Endangered Species Act	
CEQ	Council on Environmental Quality	
CFR	Code of Federal Regulations	
cfs	Cubic Feet per Second	
CGS	California Geological Survey	
CHL	California Historic Landmarks	
CNDDB	California Natural Diversity Database	
CNEL	Community Noise Equivalent Level	
CNPS	California Native Plant Society	
СО	Carbon Monoxide	
CO2	Carbon Dioxide	
Code	Code of Ordinances (Tahoe Regional Planning Agency)	
Conservancy	California Tahoe Conservancy	
Cortese List	California's Hazardous Waste and Substance Sites List	
County	El Dorado County	
CSHPO	California State Historic Preservation Officer	
CWA	Federal Clean Water Act of 1972	
CWC	California Water Code	

CWHR	California Wildlife Habitat Relationships	
dB	Decibel	
dBA	A-weighted decibel	
dbh	Diameter at Breast Height	
DCP	Dust Control Plan	
DM	Decision Memo	
DVTE	Daily Vehicle Trip Ends	
EA	Environmental Assessment	
EIP	TRPA Environmental Improvement Program	
EIR	Environmental Impact Report	
EIS	Environmental Impact Statement	
EO	Executive Order	
ESA	Endangered Species Act or Environmental Science Associates	
FEMA	Flood Emergency Management Agency	
FESA	Federal Endangered Species Act	
FHSZ	Fire Hazard Severity Zone	
FONSI	Finding of No Significant Impact	
Forest Service	United States Department of Agriculture Forest Service	
Fossils	Paleontological Resources	
GHGs Greenhouse Gases		
HAZWOPER Hazardous Waste Operations and Emergency Response		
HCM Highway Capacity Manual		
HSC Health and Safety Code		
IBC International Building Code		
IEC Initial Environmental Checklist		
in/yr Inches per Year		
IS Initial Study		
ISA	Initial Site Assessment	
Lahontan	Regional Water Quality Control Board-Lahontan Region	
LCD	Land Capability District	
LOS	Level of Service	
LTBMU	USDA Forest Service Lake Tahoe Basin Management Unit	
LVFPD	Lake Valley Fire Protection District	
MBTA	Migratory Bird Treaty Act	
mg/L	Milligrams per Liter	
mg/L^3	Microgram per Cubic Liter	
mg/L3	Microgram per Cubic Liter	
Mgal/yr	Million Gallons per Year	
mgd	Million Gallons per Day	
MND	Mitigated Negative Declaration	
MMP	Mitigation and Monitoring Program	
MND	Mitigated Negative Declaration	
MOA	Memorandum of Agreement	

MOU	Memorandum of Understanding		
msl	Mean sea level		
NAAQS	National Ambient Air Quality Standards		
NAHC	Native American Heritage Commission		
NCIC	North Central Information Center		
Neg Dec	Negative Declaration		
NEPA	National Environmental Policy Act		
NES	Natural Environment Study		
NFS	National Forest System		
NHPA	National Historic Preservation Act		
NO2	Nitrogen Dioxide		
NOC	Notice of Completion		
NOD	Notice of Determination		
NOI	Notice of Intent		
NOX	Oxides of Nitrogen		
NPDES	National Pollutant Discharge Elimination System permit program		
NRHP	National Register of Historic Places		
NWP	Nationwide Permit		
NWRA	Noxious Weed Resource Assessment		
O ₃			
OEHHA			
OES	ES Office of Emergency Services		
OMMS	S Operations Management and Maintenance Strategy		
OPR	California Governor's Office of Planning and Research		
OS	Open Space		
OSHA			
PA	Programmatic Agreement		
PAOTs			
PAS	PAS Plan Area Statements		
Pb	Lead		
PM10	Particulate Matter Less than 10 Microns in Diameter		
PM2.5	Particulate Matter Less than 2.5 Microns in Diameter		
PPM	Parts per Million		
PRC	Public Resource Code		
Project	San Bernardino Class 1 Bike Trail Project		
psi	Pounds per square inch		
ROD	Record of Decision		
ROG	Reactive organic gases		
ROS	Recreation Opportunity Spectrum		
ROW			
RTP	Regional Transportation Plan		
RWQCB			
SCH	California State Clearing House		

SEZ	Stream Environment Zones	
SH	Scenic Highway	
SHPO State Historic Preservation Office		
SIP	State Implementation Plan	
SO2	Sulfur Dioxide	
SQIP	Scenic Quality Improvement Program	
SR	State Route	
State Board	California State Water Resources Control Board	
STPUD	South Tahoe Public Utility District	
STR	South Tahoe Refuse Company	
SWPPP	Storm Water Pollution Prevention Plan	
ТСР	Traffic Control Plan	
Thresholds	TRPA Environmental Carrying Capacity Thresholds	
TKN	Total Kjeldahl Nitrogen	
TMDL Total Maximum Daily Load		
TMPO Tahoe Metropolitan Planning Organization		
TP Total Phosphorus		
TRPA Tahoe Regional Planning Agency		
TTD	TTD Tahoe Transportation District	
UBC Uniform Building Code		
USA Underground Service Alert		
USACE	United States Army Corps of Engineers	
USDA	United States Department of Agriculture	
USEPA	United States Environmental Protection Agency	
USFS	USDA Forest Service	
USFWS United States Fish and Wildlife Service		
USGS	United States Geological Survey	
VMT	Vehicle Miles of Travel	
VQO	Visual Quality Objectives	
WDR	Waste Discharge Requirements	
WUI	Wildland-Urban Interface	
µg/m3	Microgram per Cubic Meter	

2.0 **PROJECT DESCRIPTION**

This chapter describes the *San Bernardino Class 1 Bike Trail Project* (Project). Sections 2.1, 2.2 and 2.3 describe the project background, previous public involvement, and anticipated future environmental process and review, respectively. Section 2.4 details the project objectives and sections 2.5 through 2.7 detail the various components of the Project including facility features and construction controls, revegetation and restoration strategies, water quality best management practices (BMPs), and operations, maintenance and monitoring plan.

2.1 PROJECT BACKGROUND

The Project is proposed on publicly owned lands in the unincorporated community of Meyers, California in El Dorado County. Pathway and drainage improvements are proposed within the County-maintained rights of way of East and West San Bernardino Avenues, within the Tahoe Paradise Recreation and Park District (Park) boundary, and on National Forest System (NFS) lands managed by the USDA Forest Service Lake Tahoe Basin Management Unit (LTBMU).

The Park is situated on 53.5 acres of land that ranges from flat to hilly and is not easily seen from offsite locations. The Park is on the east side of the base of Echo Summit at an elevation of 6,250 feet. The topography of the Park and adjacent National Forest System (NFS) lands lends itself to many types of outdoor recreation on a year-round basis. The Upper Truckee River borders the western Park boundary and is the only river tributary to Lake Tahoe, providing many recreational opportunities.

Project area sections to the west and east of the Park are located within the Santini-Burton/Urban Forest Parcels Management Area as defined in the LTBMU *Land Management Plan*. The management emphasis within this management area is on protecting watershed conditions and community open space. Urban Forest Parcels provide opportunity for dispersed recreation within the urban setting, such as walking/hiking, wildlife viewing, cross-country skiing, and access to streams and lakes. When appropriate, recreational improvements such as system trails and shared-use pathways may occur on urban forest parcels.

The remainder of the project area and the locations of proposed improvements are located within road right of way managed by El Dorado County. East San Bernardino Avenue provides access to the Park and includes Class 3 bike route pavement marking and signage improvements. West San Bernardino Avenue provides access to the proposed Class 1 shared-use pathway on the west side of the Upper Truckee River and will also include new Class 3 bike route pavement markings and signage.

The Project has been proposed by public transportation planning agencies for several decades and is included in many applicable planning and transportation planning documents. The Project is identified as TRPA Environmental Improvement Program Project #03.01.02.0040 and will construct approximately 0.24 miles of Class 1 shared use path, and establish 0.7 miles of Class 3 Bike Route on West San Bernardino Avenue and East San Bernardino Avenue, from North Upper Truckee Road to Apache Avenue. The Class 1 Bike Trail will cross the Upper Truckee River and include connections to Washoe Meadows State Park and Tahoe Paradise Park and the Lake Tahoe Environmental Science Magnet School (LTESMS) in the community of Meyers in the Tahoe Basin.

The Project builds upon the Meyers Bikeway and provides a critical link to the bicycle network between the neighborhood on North Upper Truckee Road and the downtown community in Meyers. The Project supports the Linking Tahoe: Active Transportation Plan and Sustainable Communities Strategy, approved by the Tahoe Metropolitan Planning Organization in March 2016 and the Meyers Area Plan, approved by the County and TRPA in March 2018. The Project will install a shared use path bridge over the Upper Truckee River just west of Tahoe Paradise Park and link the bike lane facilities along North Upper Truckee Road from the west and Apache Avenue to the east.

Opportunities exist with this Project to address traffic and pedestrian safety operations at the intersection of Apache Avenue at East San Bernardino Avenue as identified in the Lake Tahoe Unified School District Safe Routes to School Master Plan found in Appendix D of the TRPA/TMPO Linking Tahoe: Active Transportation Plan, and improving the LTESMS frontage and driveway access. This Project will also connect to the future Apache Avenue Pedestrian Safety and Connectivity Project (#03.01.01.0004) which is an El Dorado County-led effort to improve overall pedestrian and bicycle safety for students, parents and the community accessing LTESMS, Apache Avenue and Meyers.

2.2 PUBLIC INVOLVEMENT

The Project is part of a series of active transportation projects to be constructed within the Lake Tahoe Basin by the County of El Dorado, Department of Transportation (Transportation). In October 2018, Transportation held a Project Development Team (PDT) meeting and in December 2018, a public meeting was held to discuss the Feasibility Report for the Project. The Feasibility Report identified alignment alternatives, compiled Best Management Practices (BMP) alternatives for mitigating specific problem areas, and presented the evaluation of the alternatives. Following these steps, a preferred alternative was selected and documented in a Preferred Project Alternative Memoranda based on input from the public meetings, correspondence received, and the results of the analyses contained in the 2018 Feasibility Report.

2.3 FUTURE ENVIRONMENTAL PROCESS AND REVIEW

This IS/IEC meets the requirements of CEQA and the TRPA Rules of Procedures and Code of Ordinances. This environmental document serves as a joint document to meet the environmental review requirements of CEQA for the County, Caltrans (as a funding agency) Lahontan, and CDFW, and the Tahoe Regional Planning Compact for the TRPA. Each agency will use the document to make decisions based on the respective agency's planning policies and statutory requirements. Sections 1.1.1, 1.1.2 and 1.1.3 in Chapter 1 detail agency roles, policies, and decision responsibilities. This document and its supporting studies will also support decisions under the requirements of the National Environmental Protection Act (NEPA). It is anticipated that a Categorical Exclusion will be processed by the USFS LTBMU.

2.4 PROJECT PURPOSE

The purpose of the Project is to complete an accessible and continuous shared-use trail that connects neighborhoods along North Upper Truckee Road and in Meyers that are currently separated by the Upper Truckee River. The Project also establishes a convenient non-auto transportation alternative and high quality recreational experience for residents and visitors along the Upper Truckee River (that connects to Washoe Meadows State Park), within Tahoe Paradise Park, and adjacent to the Lake Tahoe Environmental Science Magnet School.

Project Goals and Objectives

The goals and objectives for each component of the Project are listed in Table 2.4-1.

Table 2.4-1

Project Goals and Objectives

No.	Goal	Objective
1	Implementation of the Project should reduce vehicle miles traveled and other environmental impacts associated with automobile use by providing alternative means of travel and increasing intermodal connectivity.	Providing a pathway link supporting TRPA's Active Transportation Plan
2	Provide connectivity to recreational opportunities on a regional scale and maximize access to recreational resources throughout the Basin and to the Meyers Area Plan via a shared use path.	Providing access to local businesses, schools, and employment for bicyclists and pedestrians to reduce vehicle miles traveled (VMT).
3	Implementation of the Project shall be consistent with General Plans, Master Plans, Area Plans, and other applicable Tahoe Regional Planning Agency (TRPA) Plans.	Enhancing recreational opportunities within the Tahoe Basin.
4	Implementation of the Project should minimize the impacts to the scenic quality of the area.	Hardscape improvements shall blend into the scenic environment to the maximum extent practicable
5	Provide drainage improvements resulting in a reduction in fine (less than 20 microns) and coarse sediment, and reduction in stormwater runoff volume and peak flows.	Reduce fine and coarse sediment, stormwater runoff volume, and peak flows by 33%, to the maximum extent practicable.
		Stabilize eroding cut slopes, roadside ditches, and capture road abrasives utilizing source control Best Management Practices (BMPs)

Source: El Dorado County, 2020

2.5 PROJECT AREA

Figure 1-1 in Chapter 1 presents the regional location map and illustrates the general location of the project area and Project alignment in the southern portion of the Lake Tahoe Basin. The Project is located in the southern section of the Lake Tahoe Basin in Sections 30 and 31 of Township 12 North, Range 18 East, Mount Diablo Meridian. The Project area is surrounded by steep mountainous terrain. The approximate elevation range of the Project site is from 6,315 to 6,385 feet above mean sea level, with the elevation of the watersheds conveying runoff into the area exceeding 7,600 feet above mean sea level. Project area topography mostly consists of flat terrain with isolated slopes exceeding ten percent.

The Project vicinity is bordered by the North Upper Truckee Road on the west, Washoe Meadows State Parks on the north, U.S. Highway 50 (US 50) on the south and Apache Avenue on the east. The total Project area is approximately 10.0 acres and encompasses portions of County Right of Way (ROW), Tahoe Paradise Park, and United States Forest Service (USFS) parcels. The Project is straddled between two residential areas, North Upper Truckee and Meyers.

2.6 **PROJECT DESCRIPTION**

The Project would construct approximately 0.24 mile (1,250 lineal feet) of Class 1 shared use trail to connect West San Bernardino Avenue and East San Bernardino Avenue, and would include San Bernardino Class 3 Bike Route improvements between the new Class 1 trail and North Upper Truckee Road and the new Class 1 trail and Apache Avenue (Figure 2-1). The trail will include a bridge crossing of the Upper Truckee River with boardwalk approaches on either side of the bridge. Total length of the trail improvements would be approximately 0.95 mile.

Along the existing road right-of-way of West and East San Bernardino Avenues, the pathway will be designated as a Class 3 Bike Route by installing appropriate signage and pavement markings, as applicable. The Class 3 bike route designation will begin at the intersection of North Upper Truckee Road and West San Bernardino Avenue and continue to the end of the subdivision limits, approximately 0.4 mile. On the east side of the Upper Truckee River from the westerly end of the parking lot of Tahoe Paradise Park, the Class 3 designation will resume by installing signage to direct users toward Bakersfield Street along East San Bernardino Avenue and terminate at the intersection at Apache Avenue, approximately 0.3 mile.

The Class 1 trail segment begins at the easterly limit of the subdivision at West San Bernardino Avenue conforming to the minimum standard section consisting of an eight-foot wide pavement with two-foot compacted aggregate base shoulders on each side. The asphalt concrete trail turns to a boardwalk as the alignment approaches the Upper Truckee River and the trail crosses over the Upper Truckee River via a weathered steel truss bridge towards Tahoe Paradise Park and ties-in at the westerly portion of the existing Tahoe Paradise Park parking lot.

2.6.1 Class 1 Trail Alignment Description

Asphalt Trail

The Class 1 portion of the Project would begin at the end of pavement at West San Bernardino Avenue for a length of approximately 600 feet, ending at the proposed boardwalk structure approaching the bridge abutment. This asphalt trail would continue from the other side of the bridge for a distance of 150 feet to the connection with the existing Tahoe Paradise Park parking lot. The Class 1 trail segment follows what is presently a compacted dirt, two-track road used for utility access.

The asphalt paved trail would measure 8 feet in width with two feet of aggregate base shoulder on either side of the alignment. Therefore, the paved portions of trail would consist of 6,000 square feet of asphalt paved trail with 3,000 square feet of aggregate base trail shoulder, or 9,000 square feet of total land coverage. Pavement thickness would consist of three inches of asphalt concrete over eight inches of compacted aggregate base. Construction of the Class 1 path would require excavation of approximately 1.5 feet in depth in the existing disturbed dirt roadway.

Bridge

The bridge crossing the Upper Truckee River would measure approximately 200 feet in length by twelve feet in width with no shoulders (2,400 square feet), spanning the entire channel of the Upper Truckee River (Figure 2-2). Bridge abutments would be constructed on each side of the bridge to span the Upper Truckee River channel. Based on the preliminary and conceptual design plans for the abutments, they would measure approximately 20 by 10 feet, and 8 feet in height, and would require possible over-excavation for additional foundation support, which would be up to eight feet deep and three feet beyond the limits of the abutment footing. To facilitate the span of approximately 200 feet from end to end, an

additional support (or bent) would be located on the west side of the river channel approximately 40 feet from the western abutment. Based on the preliminary and conceptual design plans for the bent footing, it would measure 20 by 4 feet and would be located outside the ordinary high mark /active channel area. The bridge design would be a half-through truss and would be made of weathered steel trusses with a concrete bridge deck surface. The bridge railings would be up to 10 feet in height and the elevation of the bridge deck is designed to clear the 100-year base flood elevation. Figure 2-3 provides a photograph of an example of the type of bridge proposed for the river crossing. The abutments and pier footings would be protected with riprap for scour protection, approximately 1.5 ft in depth and would be placed approximately 1.5 foot in depth below the ground surface and the bent would be placed up to three feet below ground surface. The bent may consist of driven piles based on the bridge load design. The bridge would result in approximately 480 square feet of new land coverage.

Boardwalk

To reduce potential overall ground disturbance and lessen accelerated drainage and possible sedimentation near the river, two sections of boardwalk would be located at each end of the bridge approach. On the west side, the boardwalk would begin approximately 250-feet before the bridge, ending at the western base of the bridge where the trail meets the abutment. On the east side of the bridge, the boardwalk would measure approximately 50 feet in length from the base of the bridge to the connection with the asphalt trail. The boardwalk approaches would measure twelve feet in width with no shoulder. Support for the boardwalk would consist of six-inch diameter helical piers, installed at a maximum depth of eight feet. The boardwalk travel ways would therefore occupy a total of approximately 3,600 square feet of land coverage.

Drainage/Slope Protection

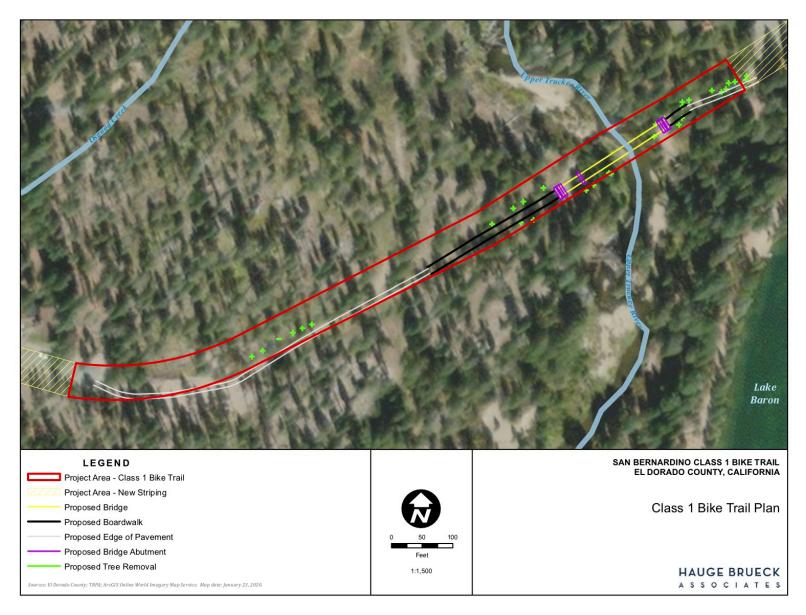
Paved trail segments will include newly constructed drainage facilities as needed to slow runoff. Facilities will consist of infiltration channels/swales, rock slope protection and rock dissipators. The facilities will capture and infiltrate runoff so it does not carry sediment to the river channel. Approximately 250 feet east of the start of the Class 1 portion of the trail from West San Bernardino Avenue, a vegetated drainage channel would be located on both sides of the paved trail, boardwalk section, and at the bridge approach, ending in rock-lined dissipators. East of the bridge, a vegetated channel would be located on the south side of the trail, extending from the edge of pavement to a rock lined dissipator at approximately the eastern bridge abutment.

Tree Removal and Protection

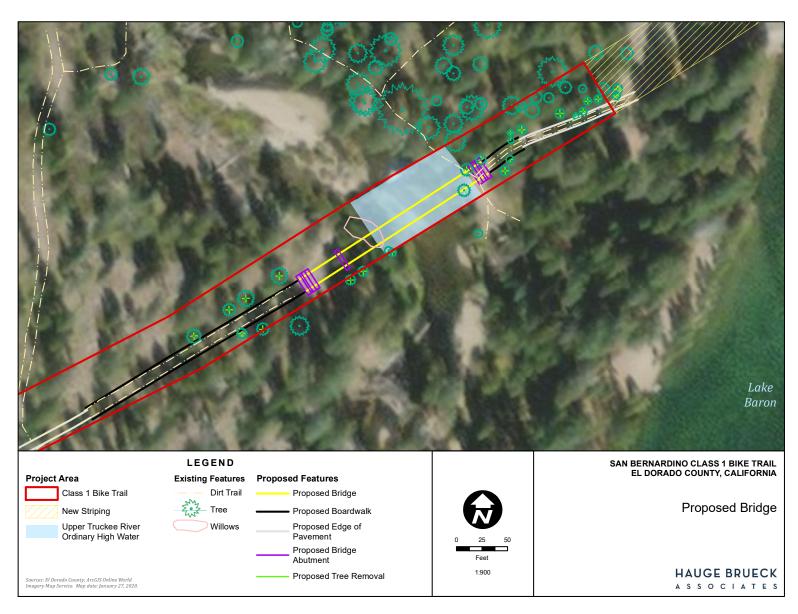
Approximately 30 lodgepole pine trees ranging in size from 6 to 24-inches in diameter at breast height (dbh) would be removed during construction of the trail. Tree protection measures include the use of temporary four-foot tall fencing around tree driplines and eight-foot tall wooden tree trunk protection as shown on Plan Sheets EC-1 and EC-2 - Erosion Control Plan and Erosion Control Details Plan Sheets. The use of tree trunk protection, rather than fencing around tree driplines would only be used in areas where use of fencing around the driplines would prohibit construction access.

Tree protection will follow the standards in TRPA Code of Ordinances Section 33.6.10. Tree removal will be done in accordance with TRPA Code Section 61.1. Section 61.1.4.A.7 indicates trees larger than 30 inches dbh in the westside forest types may be removed when it is demonstrated that the removal is necessary for the activity. Tree removal activities will be conducted in accordance with TRPA Code of Ordinances Section 61.1.6., particularly subsection C regarding tree removal within SEZ areas.









Construction Dewatering

Construction of the bridge abutments and interim support require excavation in the Upper Truckee River floodplain. Groundwater interception is likely even during late summer months when river flows are at their lowest for the year. As such, temporary dewatering will be required during construction of the abutments. As part of final trail design, a construction dewatering system will be designed to consist of facilities to move the intercepted groundwater from the abutment excavation pits to a selected dewatering location upland of the river and free of erosion and sedimentation. No work will occur within surface water of the river, avoiding direct impacts to surface water.

Figure 2-2 Bridge Design Example



2.6.2 Class 3 Bike Route Alignment Description

The Project proposes to develop a Class 3 bike route along West and East San Bernardino Avenues, approximately 0.4 and 0.3 mile, respectively. No additional paving is proposed; however, signage would be installed for user direction, and the roadway would be striped to delineate the limits of the bike route. This Class 3 bike route would extend from either side of the new Class 1 trail located between the termination of the two roadways, for a total approximate length of 3,700 feet.

Signage and Striping

A total of 16 directional signs would be installed at key locations along the Class 3 travel route portion of the project. Signs are proposed at the following intersections and trail locations:

• West San Bernardino Avenue north of N. Upper Truckee Road. (southbound sign)

- West San Bernardino Avenue north of Shawnee Street (northbound sign)
- West San Bernardino Avenue approaching Normuk Street (eastbound and westbound)
- West San Bernardino Avenue approaching Cholula Street (eastbound and westbound)
- At the start of the trail at the western most end of West San Bernardino Avenue (eastbound and westbound)
- At the start of the trail at the eastern most end of East San Bernardino Avenue (eastbound and westbound)
- East San Bernardino Avenue approaching Bakersfield Street (eastbound and westbound)
- East San Bernardino Avenue approaching Indigo Way (eastbound and westbound)
- East San Bernardino Avenue approaching Apache Avenue (eastbound and westbound)

The Class 3 trail would be striped along the edges of West San Bernardino Avenue and East San Bernardino Avenue following standard Caltrans striping specifications.

Culvert Improvements

West of the intersection with Bakersfield Street at the existing culvert, the Project proposes a 3,000 square foot sediment basin, a new sediment trap and channel leading to the basin, and a new flared end section. This culvert is a highly eroded corrugated metal pipe about 24 inches across and the downstream area of the culvert is eroded with a 7 by 8-foot depression. The culvert is partially filled with sediment, has an eroded/missing top, little to no slope, and a very shallow low flow drainage. The ordinary high water mark width at this drainage is 12 inches and 0.5 inches deep. It is believed that the intermittent, riverine drainage flowing through this culvert is federally jurisdictional and measures approximately 0.0015 acres in size. East of this culvert, the Project proposes an infiltration trench and new culvert on East San Bernardino Avenue leading to the sediment trap and sediment basin at the intersection with Bakersfield Street. The flared end section and rock dissipator would place an 18-inch thickness of rock over a turf reinforcement mat to reduce erosion and sedimentation. Approximately 12-inches of rock would also cover the culvert pipe, and the disturbed areas would be revegetated. No tree removal would occur.

2.6.3 Construction Regulatory Compliance Measures and Best Management Practices

Staging

Temporary construction staging and storage would be located at the easternmost end of West San Bernardino Avenue (approximately 3,285 square feet of previously disturbed right of way) and at the existing Tahoe Paradise Park paved parking lot east of the Upper Truckee River (1,383 square feet). These staging areas and the currently unpaved portion of trail alignment would be fenced during construction. A type 1 temporary construction entrance (per Caltrans Standard Plan T58) would be located at the east end of West San Bernardino Avenue within the staging area.

Regulatory Compliance Measures and Best Management Practices

The project is required to comply with local, state, and federal regulations pertaining to protection of human health, safety, and environment. Specifically, the project would be required to comply with the TRPA Code of Ordinances, El Dorado County General Plan, Lahontan RWQCB, and Lake Tahoe Regional Plan.

The following required construction controls from local and state agencies have been incorporated into the project design.

Air Quality

The El Dorado County Air Quality Management District (EDCAQMD) District Rule 223 includes requirements for construction projects. Control measures for construction and other earth moving activities must follow the guidelines presented in Table 1 of Rule 223-1 "Best Management Practice". These requirements include, but are not limited to, creation and implementation of a Fugitive Dust Plan, trackout management practices at the construction site, visible emissions limitation, vehicle speed limitations, material handling, and control for stockpiles and disturbed areas.

Biological Resources

The project is required to implement the following applicable TRPA Code of Ordinance standards which protect biological resources:

- 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 33.6.9 and 33.6.10. Disturbed areas shall be revegetated pursuant to 33.6.8.
- All hay, straw, hay bales, straw bales, seed, mulch or other material used for erosion control or landscaping shall be free of noxious weed seeds and propagules.
- All equipment brought to a project site for construction shall be thoroughly cleaned of all dirt and vegetation prior to entering the site in order to prevent importing noxious weeds.
- All materials brought to a project site, including rock, gravel, road base, sand, and topsoil, shall be free of noxious weed seeds and propagules.
- The property owner shall maintain and implement an effective program for the monitoring and control of noxious weeds.

Cultural Resources

The Project is subject to the regulations and standards established in The National Historic Preservation Act, the California Register of Historical Resources (PRC § 5024.1(a)), Public Resources Code §5097.5, Caltrans *Standard Environmental Reference*, and the TRPA Code of Ordinances. The project is required to implement the following applicable regulations and standards which protect cultural resources:

- Caltrans *Standard Environmental Reference* (SER) (revised 2015) contains procedures that shall be followed if previously unidentified archaeological resources are encountered during construction, and the following compliance measure is integrated into Project implementation:
 - In the event of inadvertent discovery during construction, the following procedures must be implemented: Caltrans district shall promptly stop construction activity near the property and implement all reasonable measures needed to avoid, minimize, or mitigate further harm to the property. Once a discovery is made, the 106 PA provides for the following actions:
 - 1. Caltrans district notifies CSO and SHPO within 48 hours. Caltrans district may furnish this information through correspondence, hard copy, electronic media, telephone, or meetings, at its discretion taking into account the

capabilities of the consulting parties and must document this process for the administrative record.

- 2. Caltrans district notifies Indian tribes and/or Native American groups that may attach religious or cultural significance to the property within 48 hours.
- TRPA Code of Ordinances (Historic Resource Protection) Section 67.3 *Resource Projection* outlines requirements for the accidental discovery of resources during construction (subsection 67.3.1), requirements for site survey and consultation with the Washoe Tribe (subsection 67.3.2), and requirements for protection of known resources. Consultation with area tribes occurred, as did intensive pedestrian surveys of the area and no resources were identified within the Project area. Therefore, the following measures are integrated into the Project implementation plan as regulatory compliance measures:
 - If, during the course of a project or activity, a potential archaeological, cultural, or historical resource is discovered, all operations shall stop until a qualified archaeologist has evaluated the potential for significance of the resource. In the event inadvertent cultural resources are discovered as a result of project activities, the Washoe Tribe and UAIC will be notified.
- Should human remains be uncovered, the statutes of State of California Health and Safety Code Section 7050.5 must be followed. The County Coroner must be notified of the find immediately, and no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendent. The Most Likely Descendent shall complete the inspection of the site within 24 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Geology and Soils

- The project would require the County to prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the Lahontan Regional Water Quality Control Board (RWQCB) to comply with the Stormwater General Permit. The purpose of the SWPPP is to protect soil and water resources from impacts during construction, including groundwater. As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan, and a Dewatering Plan that will be approved by El Dorado County. The plan would designate BMPs to minimize impact from erosion and sedimentation. At a minimum, the following geology and soils controls must be implemented:
 - Temporary erosion control devices shall be placed down-gradient of dirt piles, excavated areas, or stockpiles
 - Coverings shall be placed on all dirt piles during non-working hours
 - Vegetation protection fencing shall be installed to protect existing vegetation where feasible
 - Disturbed areas shall be revegetated to stabilize soils
 - Stabilize disturbed areas with mulch until vegetation is reestablished
 - Use of tracking controls
 - Parking on paved and existing disturbed areas only

Greenhouse Gas Emissions and Green Energy

The project must implement the Basic Construction Emission Control Practices and the measures listed in the Guidance for Construction GHG Emissions Reductions developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD 2016), which includes measures to improve fuel efficiency, limit emissions, use green energy sources, and recycling of materials. These include:

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
- Train equipment operators in proper use of equipment.
- Use the proper size of equipment for the job.
- Use equipment with new technologies (repowered engines, electric drive trains).
- Perform on-site material hauling with trucks equipped with on-road engines (if determined to be less emissive than the off-road engines).
- Use alternative fuels for generators at construction sites such as propane or solar or use electrical power.
- Use a California Air Resources Board (CARB)-approved low carbon fuel for construction equipment. (Nitrogen oxide emissions from the use of low-carbon fuel must be reviewed and increases mitigated.)
- Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking for construction worker commutes.
- Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight).
- Use SmartWay certified trucks for deliveries and equipment transport.
- Develop a plan to efficiently use water for adequate dust control.

Hydrology and Water Quality

The permittee must develop and implement a Stormwater Management Plan (Order No. R6T-2017-0010, National Pollutant Discharge Elimination System (NPDES) permit No. CAG616002) and a SWPPP (Tahoe Construction Permit R6T-2016-0010). As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan, and a Dewatering Plan that will be approved by El Dorado County. These plans must outline measures that will protect hydrology and water quality resources, including groundwater, from negative impacts during construction. The SWPPP will need to be approved by the Lahontan Regional Quality Control Board.

Additionally, TRPA Code of Ordinances Chapter 60: Water Quality – outlines standards intended to protect water quality through requirements for the installation of BMPs to protect and restore water quality, as set forth in Section 60.4.6 – Standard BMP Requirements.

Construction site stormwater BMPs would follow the Caltrans Construction Site Best Management Practices Manual (California Department of Transportation [Caltrans] 2017) and the TRPA BMP Handbook (TRPA 2014) to control and minimize the impacts of construction related activities. The following BMPs, at a minimum, are required at the site during construction:

- Temporary erosion and sediment control BMPs to prevent the transport of earthen materials and other construction waste materials from disturbed land areas, stockpiles, and staging areas during periods of precipitation or runoff (such as silt fence, erosion control fabric, fiber rolls)
- Tracking controls (such as designated ingress and egress areas) and designated staging areas outside of drainage, swale, and SEZ areas. Staging area to be restored in accordance with TRPA Code Section 61.4 (Revegetation)
- Temporary BMPs to prevent wind erosion and sediment transport of disturbed areas, such as use of water for dust control and covering of stockpiles
- Limit grading to May 1 through October 15, unless an exemption is granted by TRPA. At the end of the grading season or before completion of the project, all surplus or waste earthen materials from the project site would be removed and disposed of at a TRPA approved disposal site or stabilized on-site in accordance with TRPA regulations.
- Implement a Spill Prevention Plan (see Hazards and Hazardous Materials below). Phase III project contractors would be responsible for storing on-site materials and temporary BMPs capable of capturing and containing pollutants.
- Implement a Dewatering Plan as part of the SWPPP, to outline the process that will be required of the project contractors if groundwater is intercepted during construction. The Dewatering Plan shall be prepared and submitted for approval by Transportation, Lahontan RWQCB, and TRPA prior to commencement of construction.
- Construction sequencing shall be designed to avoid and minimize the potential of encountering groundwater during construction.
- Use of vegetation protection fencing to prevent damage to trees or other vegetation where possible
- Use of construction boundary fencing to limit land disturbance to areas not planned for construction
- Temporary erosion and sediment control devices will be placed in accordance with the shown plans to protect sediment laden runoff from discharging from the site.
- Construction fencing shall be placed around SEZ areas.

Hazards and Hazardous Materials

A Spill Contingency Plan shall be developed along with the project specific SWPPP to detail site specific BMPs and TRPA approved methods to prevent accidental spills from impacting water and land resources. The plan shall outline response protocols and information for contacting the Lahontan RWQCB and other responsible agencies. Additionally, spill containment and absorbent materials shall be kept onsite at all times, and petroleum products and hazardous waste shall be removed from the project area and disposed of at an appropriate location.

Noise During Construction

The project shall be constructed during the TRPA exempt hours of 8:00 a.m. and 6:30 p.m. per TRPA Code and the County's General Plan to reduce the impacts of temporarily increased ambient noise levels on nearby residences.

2.7 PROJECT IMPLEMENTATION SCHEDULE

The Project would be constructed over a four-month period, beginning in July 2020. Striping and signage installation for the Class 3 portion of the project would be a concurrent, but separate phase. Construction of the Class 1 trail would begin with grading and site preparation, followed by paving and installation of the boardwalk travelway and bridge elements.

2.8 OPERATIONS, MANAGEMENT AND MAINTENANCE STRATEGY

The maintenance and monitoring of the proposed Project improvements will continue in perpetuity after construction completion. Revegetation monitoring will continue for a minimum of two years following construction. Plant establishment will include irrigation and replanting, if necessary. The County will inspect all Project improvements during the spring and fall of each year. County engineering staff will direct maintenance based on results of the inspections. Photographs will be taken before and after construction for a period of two years and following significant storm events to monitor Project improvement performance. The County will also conduct snow removal to maintain trail accessibility in the winter.

3.0 ENVIRONMENTAL CHECKLIST AND IMPACT ANALYSIS

The proposed Project requires El Dorado County Board of Supervisors and TRPA Governing Board approval. Approval may also be required by the Army Corps of Engineers, U.S Fish and Wildlife, California Department of Fish and Wildlife, the California Regional Water Quality Control Board, Lahontan Region, and/or El Dorado County Air Quality Management District. Caltrans will require the County to submit a Request for Authorization to Proceed with Construction to secure federal funding per the Local Assistance Procedures Manual.

3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

If environmental factors are checked below, there would be at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Applicable mitigation measures for general and cumulative impacts associated with the County General Plan and the TRPA RPU are incorporated into the project approval.

Aesthetics	Agriculture/Forest Resources	Air Quality
Biological Resources	Cultural Resources	Energy
Geology Resources	Greenhouse Gas Emissions	Hazards/Hazardous Materials
Hydrology/Water Quality	Land Use/Planning	Mineral Resources
Noise	Population/Housing	Public Services
Recreation	Transportation/Traffic	Tribal Cultural Resources
Utilities/Service Systems	Wildfire Wildfire	Mandatory Findings of Significance
	□ None	None with Mitigation Incorporated

3.2 CEQA ENVIROMENTAL DETERMINATION

On the basis of this Initial Study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

Donaldo Palaroan, P.E., Senior Civil Engineer County of El Dorado Date

3.3 TRPA ENVIRONMENTAL DETERMINATION (TO BE COMPLETED BY TRPA)

On the basis of this TRPA Initial Environmental Checklist:

Si	gnature of Evaluator	Date			
C.	The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedures.		Yes		No
b.	The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedures.		Yes		No
a.	The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedures		Yes	\boxtimes	No

Title of Evaluator

3.4 EVALUATION OF ENVIRONMENTAL IMPACTS

The following environmental analysis has been prepared using the CEQA Guidelines Appendix G: Environmental Checklist Form to complete an Initial Study (IS). This checklist also includes analysis of environmental impacts required in the TRPA Initial Environmental Checklist (IEC) found at: http://www.trpa.org/wp-content/uploads/Initial Environmental Checklist.pdf.

3.4.1 CEQA

CEQA requires a brief explanation for answers to the Environmental Checklist except "No Impact" responses that are adequately supported by noted information sources (see Table 3.4.1-1). Answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Table 3.4.1-1: CEQA Defined Levels of Impact Significance		
Impact Severity	Definition	
No Impact	A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).	
Less than Significant Impact	"Less than Significant Impact" applies where the Project's impact creates no significant impacts based on the criterion or criteria that sets the level of impact to a resource and require no mitigation to avoid or reduce impacts.	
Less than Significant Impact after Mitigation	"Less than Significant Impact after Mitigation" applies where the incorporation of mitigation measures has reduced an effect from potentially "Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.	
Significant Impact	"Significant Impact" is appropriate if there is substantial evidence that an effect is potentially significant, as based on the criterion or criteria that sets the level of impact to a resource. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.	
Source: CEQA Appendix G Environmental Checklist Form 2020		

3.4.2 TRPA

Article VI of the TRPA Rules of Procedures presents the rules governing the preparation and processing of environmental documents pursuant to Article VII of the Compact and Chapter 3 of the Revised TRPA Code of Ordinances.

TRPA uses an IEC, in conjunction with other available information, to determine whether an EIS will be prepared for a project or other matter. This could include preparation of an Environmental Assessment, in accordance with Section 3.4 of the TRPA revised Code, when TRPA determines that an IEC will not provide sufficient information to make the necessary findings for a project.

The IEC includes a series of questions categorized by and pertaining to resources regulated by TRPA. Each checklist item requires a checked response of "Yes," "No," "No, with Mitigation," or "Data Insufficient." A checked response of "Data Insufficient" or a determination that a project may have a significant effect on the environment (Section 3.3.2 of the TRPA Code) indicates that additional

environmental review in the form of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) would be required. The IEC form indicates that all "Yes" and "No, with Mitigation" responses require written explanations. This IEC provides supporting narrative for all responses. Where a checked response may not be intuitive or easily understood by the reader, that response has been marked with an asterisk (*) and a brief clarifying statement supporting the rationale for the checked response is included. Based on an initial review of the Project, TRPA and City staff determined that an IEC would provide sufficient information regarding the Project to make one of the findings below. As set forth in Code Subsection 3.3.1, based on the information submitted in the IEC, and other information known to TRPA, TRPA shall make one of the following findings and take the identified action:

- 1. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.
- 2. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.
- 3. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this Chapter and TRPA's Rules of Procedure.

When completed, TRPA reviews the IEC to determine the adequacy and objectivity of the responses. When appropriate, TRPA consults informally with federal, state, or local agencies with jurisdiction over the project or with special expertise on applicable environmental impacts.

3.4.3 Aesthetics (CEQA), Scenic Resources/Community Design and Light and Glare (TRPA)

This section presents the analyses for potential impacts to aesthetics, scenic resources/community design and light and glare. Table 3.4.3-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.3-1: Aesthetics, Scenic Resources/Community Design and Light and Glare					
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	
3.4.3-1. Have a substantial adverse effect on a scenic vista? (CEQA Ia)		X			
3.4.3-2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway? (CEQA Ib)				X	
3.4.3-3. Substantially degrade the existing visual character or quality of the site and its surroundings? (CEQA Ic)		X			
3.4.3-4. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (CEQA Id)			Х		
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No	
	Yes			No X	
Checklist Item3.4.3-5. Be visible from any state or federal highway, Pioneer Trail or from	Yes				
Checklist Item3.4.3-5. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? (TRPA item 18a)3.4.3-6. Be visible from any public recreation area or TRPA designated	Yes	Mitigation			
Checklist Item3.4.3-5. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? (TRPA item 18a)3.4.3-6. Be visible from any public recreation area or TRPA designated bicycle trail? (TRPA item 18b)3.4.3-7. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public	Yes	Mitigation			

3.4.3-10. Include new or modified sources of exterior lighting? (TRPA item 7a)	X
3.4.3-11. Create new illumination which is more substantial than other lighting, if any, within the surrounding area? (TRPA item 7b)	Х
3.4.3-12. Cause light from exterior sources to be cast off-site or onto public lands? (TRPA item 7c)	Х
3.4.3-13. Create new sources of glare through the siting of the improvements or through the use of reflective materials? (TRPA item 7d)	Х

Environmental Setting

The project area includes existing paved residential neighborhood streets within the Class 3 portion of the alignment, and park and undeveloped public lands within the Class 1 portion of the alignment. The Class 1 portion is located on lands manage by the USFS and by the Tahoe Paradise Recreation and Park District. This area includes improved recreational amenities, such as roads and parking lots, informational signage, recreation courts and fields, clubhouse, playground, picnic areas, and undeveloped lands around the river. An existing dirt utility road is located within the trail alignment. There are no designated scenic roadways within the Project alignment and the Project is not visible from scenic roadways.

The Upper Truckee River is the dominant visual resource in the Class 1 portion of the Project area. Photodocumentation is provided in the Visual Resources Technical Memo (Appendix B), which assesses the potential impacts of the Project.

El Dorado County and TRPA

Portions of the project area outside of NFS lands fall under the jurisdiction of El Dorado County and the Tahoe Regional Planning Agency (TRPA). These portions of the project area fall within the Park boundary and are not visible from offsite locations. The Park is not identified as a sensitive scenic resource in either the *Meyers Area Plan* or the TRPA *Regional Plan*. As such, there are no additional scenic resource indicators that must be applied to this analysis for the County or TRPA.

USFS

The goal of scenic resource management on all NFS lands is to manage for the highest possible visual quality, commensurate with other appropriate public uses, costs, and benefits. Since the mid-1970s, the Forest Service has operated under the guidance of the Visual Management System (VMS) for inventorying, evaluating, and managing scenic resources on NFS lands. More recently the Scenery Management System (SMS) has been used to evaluate changes in visual character from project activities. As stated in the Land Management Plan, "Scenic integrity is a measure of the degree to which the valued scenic attributes are present within the landscape. The highest scenic integrity ratings are given to those landscapes which have little or no deviation from the character valued by constituents for its aesthetic appeal...."

The *Land Management Plan* includes minimum scenic integrity objectives for LTBMU lands (see Map 10 in Attachment B) - the minimally acceptable levels of scenic integrity for a given area. Project design and activity planning should meet or exceed minimum scenic integrity objectives for the project or activity area and should maintain or enhance scenic integrity. A Minimum Scenic Integrity Objective (MSIO) map identifies assigned MSIO levels to NFS lands. Scenic Class, which describes the relative "social value" of areas for their scenery was the starting point for determining MSIO levels. Factors that affect Scenic Class include the inherent attractiveness of the area and its visibility from key viewing areas and travel routes.

NFS lands in the Meyers area are assigned a "high" MSIO rating, which is defined as landscapes where the valued landscape character "appears" intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.

The 2016 Forest Plan standards and guidelines for scenic resources includes the following:

SG117. Scenic resource and built environment guidelines are incorporated into management activities and into the design and development of agency facilities. All resource management and permitted activities shall meet or exceed the established scenery objectives shown on the MSIO map. Utilize techniques such as:

- Size areas cleared for management objectives to meet minimum requirements for operability and safety.
- With consideration for scenic objectives, maintain clumps of trees within cleared areas if they do not pose a safety or operational risk.
- Maintain understory vegetation within cleared corridors if they do not pose a safety or operational risk.

Environmental Analysis and Mitigation Measures

3.4.3-1. Would the Project have a substantial adverse effect on a scenic vista? (CEQA Ia)

<u>Standard of Significance:</u> Creating visually dominant features that are out of scale with the surrounding landscape constitutes a significant impact to scenic vistas under CEQA. Points of significance include: 1) creation of strong visual contrast; 2) reduction in scenic vista area; and/or 3) non-compliance with scenic resource goals, policies or standards of federal, state of local agencies. CEQA relies on local policies to define scenic vistas.

Environmental Analysis: Less than Significant Impact with Mitigation Measures.

Roadway pavement markings and signage would not be noticeable off-site as no perceptible change would occur from off-site viewing distances as a result of creating Class 3 bike route designation. Likewise, repair of existing pavement in the Park and at the end of West San Bernardino Avenue would not be perceptible from off-site locations.

Class 1 trail and drainage facility construction requires grading and the removal of trees along the unpaved corridor where they are located within the excavation limits for the pathway construction. Class 1 construction would begin at the end of West San Bernardino Avenue, follow an existing user created dirt trail to the bank of the Upper Truckee River, cross the river using a new 200 foot-long elevated bridge structure, then follow an existing Park dirt trail to connect with the Park's paved parking lot. Plan sheets

(e.g., sheet L-3) in Appendix A identify the portions of the pathway where tree removal would occur. Most tree removal would occur near the river crossing, with a concentration of trees removed in the shorter distance of trail between the bridge and the Park parking lot (approximately 30 trees).

Tree removal and construction of the bridge as shown in Appendix A will create a noticeable deviation to the existing landscape character of the Upper Truckee River from viewpoints within adjacent NFS lands (west of the bridge location) by modifying existing vegetation patterns, line, color and form; the bridge construction would stand out compared to the existing mostly unaltered landscape character of the river corridor and would be evident but not dominant in degree of change. The bridge would increase the presence of man-made features that currently include several user-created foot trails, a small pump house, overhead utility lines and sheet pile that was placed perpendicularly in the river channel to protect a utility pipeline. The change created by construction of the proposed shared-use pathway bridge would not be consistent with the scenic integrity goals for the NFS lands in the project area but would mimic built elements similar to those currently located in the vicinity (Park and utility facilities, foot trails and the steel sheet pile located in the river channel).

Visibility of the bridge construction would be limited to the immediate area in which viewers are located and obscured from other locations by topography, retained trees, and other ground vegetation. For recreational users, the pathway and bridge structure would not be out of place in the river corridor landscape as recreational facilities are located in many similar NFS land locations (e.g., Saxon Creek, Blackwood Creek, Rabe Meadow) and recreational areas in the region. Measures required in the design of the bridge structure to reduce the amount of deviation to the landscape are demonstrated in Figure 6 of the Visual Resources Memorandum (Appendix B) and include low profile bridge rail design, natural appearing building materials and color consistent with adjacent landscape. Use of a low profile bridge railing with horizontal cabling rather than solid steel tubing, natural and darker paint colors (e.g., selfrusting steel with reddish/brown patina surfaces and stained concrete using darker colors), and retention of existing boulders, groundcover and shrubs in the bridge vicinity ensures that the proposed bridge structure would not be visually out of place with the adjacent landscape character when compared to other similar recreational uses on NFS lands in the LTBMU, and State and local recreation areas in the project vicinity.

Required Mitigation: VIS-1: Bridge Design Elements

- a) The bridge structure shall include design elements to reduce visual deviation with the existing landscape or blend the structure with the existing background.
- b) The truss railing shall have a low profile using horizontal cabling instead of larger steel tubing.
- c) The weathered steel shall not deviate in coloration so as to cause a contrast with the landscape. The weathered steel's red/brown patina shall not create significant contrast with the surrounding vegetation.
- d) To screen the bridge and maintain the characteristic tree coverage in the area, replacement trees shall be located along the boardwalk and paved trail area where tree removal has occurred. Disturbed areas not paved by the trail, shall be revegetated appropriately for the location, considering the river channel, rock slope protection areas, and drainage dissipation devices.

3.4.3-2. Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (CEQA Ib)

Standard of Significance: See criteria listed for 3.4.3-1.

Environmental Analysis: Less than Significant Impact.

The Project is not visible from a State scenic highway. The majority of pathway construction would not be visible from off-site locations due to intervening topography and vegetation. New pavement at the beginning of the paved Class 1 shared-use pathway would be visible from the residential neighborhood located along West San Bernardino Avenue and would be consistent with existing pavement features currently visible in the neighborhood. The bridge crossing of the Upper Truckee River and other sections of the paved shared-use pathway would not be visible from public roadways, residential areas or offsite recreational facilities (e.g., CA State Parks land to the north).

Required Mitigation: None.

3.4.3-3. Would the Project substantially degrade the existing visual character or quality of the site and its surroundings? (CEQA Ic)

<u>Standard of Significance:</u> Degradation in visual quality or elimination of a specific scenic resource results in a significant impact to scenic resources.

Environmental Analysis: Less than Significant Impact with Mitigation Measures.

As discussed above in Questions 3.4.3-1 (CEQA Checklist 1a), the bridge structure would be visible within Tahoe Paradise Park and LTBMU lands and has the potential to affect the visual character of the site by placing an elevated bridge structure across the Upper Truckee River where views of the river are primarily limited to the river channel and surrounding vegetation. Although the nearby visual quality includes recreational and residential structures, it is recommended that the landscape views remain the prominent visual feature in the area. Bridge design elements that reduce the prominence of the structure and blend it into the surrounding area would reduce this impact to less than significant and help maintain the character of the site.

Required Mitigation: VIS-1: Bridge Design Elements - see description above.

3.4.3-4. Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (CEQA Id)

<u>Standard of Significance:</u> An increase in night lighting or glare sufficient to enter adjacent residences constitutes a significant impact on day or nighttime views in the project area.

Environmental Analysis: Less than Significant Impact.

No lighting is proposed. The bridge would be constructed of weathered steel trusses with a concrete deck surface. The trusses would be weathered and coated in non-reflective material to avoid creation of glare.

Required Mitigation: None.

3.4.3-5. Would the Project be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? (TRPA 18a)

<u>Standard of Significance:</u> A degradation of adopted TRPA scenic thresholds including scenic travel route or scenic quality ratings constitutes a significant impact on scenic resources

Environmental Analysis: No Impact.

The project is not visible from U.S. Highway 50, State Route 89, Pioneer Trail, or Lake Tahoe.

Required Mitigation: None.

3.4.3-6. Would the Project be visible from any public recreation area or TRPA designated bicycle trail? (TRPA 18b)

<u>Standard of Significance:</u> A reduction in scenic vista area viewed from foreground or middleground from a public recreation area or degradation in visual quality or elimination of a TRPA designated scenic resource constitutes a significant impact to scenic resources.

Environmental Analysis: No, with Mitigation.

The Project is not visible from TRPA designated public recreation area or bicycle trails. However, as discussed above in Question 3.4.3-1 (CEQA Checklist 1a), the Project is visible from USFS lands and the Tahoe Paradise Park recreation area. Since the alignment crosses the Upper Truckee River, and is just north of Lake Baron, the trail or portions of the trail may be visible from both of these areas. As discussed in the Visual Resources Technical Memorandum (Appendix B), use of low profile bridge elements and landscaping would integrate the Project into the surrounding landscape

Required Mitigation: VIS-1: Bridge Design Elements - see description above.

3.4.3-7. Would the Project block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area? (TRPA 18c)

<u>Standard of Significance</u>: Creating visually dominant features that are out of scale with the surrounding landscape constituents a significant impact to Lake Tahoe or other scenic vistas. Points of significance include: 1) creation of strong visual contrast; 2) reduction in scenic vista area viewed from foreground or middleground; and/or 3) non-compliance with scenic resource goals, policies or standards of federal, state of local agencies.

Environmental Analysis: No, with Mitigation.

As discussed above in Questions 3.4.3-1 (CEQA Checklist 1a) and 3.4.3-6 (TRPA 18b), the Project area is not visible from Lake Tahoe and blocks no views of Lake Tahoe from public roads or areas. However, the alignment is visible from public roads and public areas. While the Class 3 portion of the Project would not result in any modifications to scenic vistas, and the majority of the Class 1 alignment is a flat trail at or near ground level, the bridge crossing the Upper Truckee River would modify the view of the river at this crossing. While there are recreational structures and facilities in this area that are compatible with a bridge addition, implementation of Mitigation Measures VIS-1 would reduce the visual contrast of the bridge with the surrounding landscape.

Required Mitigation: VIS-1: Bridge Design Elements - see description above.

3.4.3-8. Would the Project be inconsistent with the height and design standards required by the applicable ordinance or Community Plan? (TRPA 18d)

<u>Standard of Significance:</u> The TRPA Regional Plan and Code of Ordinances provide standards that are applicable to the Project. TRPA Code Chapter 37 sets forth standards for building height and are not applicable to the Project. TRPA Code Chapters 36 (Design Standards) and 66 (Scenic Quality) set forth standards to ensure projects are designed and constructed consistent with Community Design Subelement of the Regional Plan Land Use Element. An inconsistency with these standards would result in a significant impact.

Environmental Analysis: No Impact.

The Project is a linear bike trail with no vertical structures of significant height and would be consistent with Code Chapter 37 height standards. A bridge crossing the Upper Truckee River is proposed and would measure 200 feet in length. The bridge abutments on either side of the river would be approximately 8 feet above existing ground surface level, with the bridge railing measuring approximately 3.5 to up to 10 feet in height. The bridge would be constructed of weathered steel trusses with a concrete deck surface and is of a design used at other river and stream crossings in the area.

Required Mitigation: None.

3.4.3-9. Would the Project be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines? (TRPA 18e)

<u>Standard of Significance</u>: The SQIP requires that scenic roadway unit ratings be maintained. Six criteria define the ratings: 1) manmade features; 2) roadway physical distractions; 3) road structure; 4) views of Lake Tahoe; 5) landscape views; and 6) variety. Impacts to these criteria may decrease scenic quality rating. The TRPA SQIP presents the prescriptions for scenic restoration required to attain and maintain the scenic quality thresholds. The program includes design review guidelines and development standards for different visual environments, assigns implementation responsibilities, and identifies potential funding sources.

Environmental Analysis: No Impact.

The project area is not included in SQIP recommendations to improve scenic quality. Recommended design review guidelines and development standards of the TRPA Regional Plan, Meyers Area Plan and USFS LTBMU Forest Plan are incorporated into the trail and bridge design.

Required Mitigation: None.

3.4.3-10. Would the Project include new or modified sources of exterior lighting? (TRPA 7a)

Standard of Significance: An increase in night lighting or glare sufficient to enter adjacent land uses.

See discussion and analysis for Question 5.4.3-4, which concludes no significant impact.

Environmental Analysis: No Impact.

Required Mitigation: None.

3.4.3-11. Would the Project create new illumination, which is more substantial than other lighting, if any, within the surrounding area? (TRPA 7b)

<u>Standard of Significance:</u> An increase in lighting intensity greater than the existing condition so as to alter views or redirect the visual focus of the area.

Environmental Analysis: No Impact.

See discussions and analysis and for Question 3.4.3-4, which concludes no significant impact.

Required Mitigation: None.

3.4.3-12. Would the Project cause light from exterior sources to be cast off-site or onto public lands? (TRPA 7c)

<u>Standard of Significance:</u> An increase in night lighting or glare sufficient to enter adjacent public lands beyond the area intended for illumination.

Environmental Analysis: No Impact.

See discussions and analysis for Question 3.4.3-4, which concludes no significant impact.

Required Mitigation: None.

3.4.3-13 Would the Project create new sources of glare through the siting of the improvements or through the use of reflective materials? (TRPA 7d)

<u>Standard of Significance:</u> An increase in glare from new structural elements sufficient to enter adjacent land uses or alter views constitutes a significant impact.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.3-4, which concludes no significant impact.

Required Mitigation: None.

3.4.4 Agriculture and Forestry Resources

This section presents the analyses for potential impacts to agriculture and forestry resources. Some TRPA checklist items concern impacts to vegetation, which are addressed in Section 3.4.6, Biological Resources. Table 3.4.4-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.4-1: Agriculture and Forestry Resources				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.4-1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA Resources Agency, to a non-agricultural use? (CEQA IIa)				X
3.4.4-2. Conflict with existing zoning for agricultural use, or a Williamson Act contract? (CEQA IIb)				X
3.4.4-3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g), timberland (as defined by Public Resource Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (CEQA IIc)				X
3.4.4-4. Result in the loss of forest land or conversion of forest land to non-forest use? (CEQA IId)				X
3.4.4-5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (CEQA IIe)				X

Environmental Setting

The project area contains no lands identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, zoned for agricultural use, or a Williamson Act contract. The project area contains forestland, or timberlands, as defined by Public Resource Code (PRC) Section 4526. The project area contains no timberland or timberland zoned Timberland Production, as defined by Government Code Section 51104(g).

Environmental Analysis and Mitigation Measures

3.4.4-1. Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use? (CEQA IIa)

<u>Standard of Significance:</u> Conversion of Prime Farmland, Unique Farmland or Farmland of Statewide importance (i.e., Farmland) to a non-agricultural use constitutes a significant impact.

Environmental Analysis: No Impact.

The Project is not located in an area identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, and therefore poses no impact to such lands.

Required Mitigation: None.

3.4.4-2. Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract? (CEQA IIb)

<u>Standard of Significance:</u> A conflict with areas zones for agricultural use under a Williamson Act contract constitutes a significant impact.

Environmental Analysis: No Impact.

No conflicts with zoning for agricultural use or a Williamson Act contract would occur because no contracts exist within the Project area.

Required Mitigation: None.

3.4.4-3. Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g), timberland (as defined by Public Resource Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (CEQA IIc)

<u>Standard of Significance:</u> A conflict with existing zoning for forest land or timberland creates a significant impact. PRC Section 12220, Article 3 (g) defines "Forest land" 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. PRC Section 4526 defines "Timberland" as land, other than land owned by the federal government and land designated by the board as

experimental forestland, which is available for, and capable of, growing a crop of tree of any commercial species used to produce lumber and other forest products, including Christmas trees.

Environmental Analysis: No Impact.

The Project conflicts with no existing zoning and causes no rezoning of forest land, timberland or timberland zoned Timberland Production. The portion of the Project requiring tree removal is a small subset of the total project area and tree removal is not concentrated, but instead spread out along the Project area and trail corridor, which does not conflict with the underlying zoning.

Required Mitigation: None.

3.4.4-4. Would the Project result in the loss of forest land or conversion of forest land to non-forest use? (CEQA IId)

<u>Standard of Significance</u>: The loss of substantial forest land, defined above for Question 3.4.4-4, or conversion of forest land to non-forest use creates a significant impact if appropriate permits are not obtained.

Environmental Analysis: No Impact

The Project transects moderately forested lands and provides access but results in no loss of areas designated as forest land or conversion of forest land to non-forest use by nature of passing through such areas. The Project affects less than an acre of land, the majority of which is within existing paved roadway right-of-way; therefore, a Public Agency Right-of-Way exemption with Calfire is not required.

Required Mitigation: None.

3.4.4-5. Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (CEQA IIe)

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.4-2, -3, and -4 which conclude no significant impacts to farmland or forest land.

Required Mitigation: None.

3.4.5 Air Quality

This section presents the analyses for potential impacts to air quality. Table 3.4.5-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.5-1: Air Quality				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.5-1. Conflict with or obstruct implementation of the applicable air quality plan? (CEQA IIIa)			Х	
3.4.5-2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standards? (CEQA IIIb)			х	
3.4.5-3. Expose sensitive receptors to substantial pollutant concentrations? (CEQA IIIc)			X	
3.4.5-4. Result in other emissions, such as objectionable odors, adversely affecting a substantial number of people? (CEQA IIId)			Х	
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.5-5. Substantial air pollutant emissions? (TRPA 2a)				Х
3.4.5-6. Deterioration of ambient (existing) air quality? (TRPA 2b)				X
3.4.5-7. Creation of objectionable odors? (TRPA 2c)				X

Environmental Setting

Federal, State, and regional standards apply to protect air quality within this project area, which is contained within the Lake Tahoe Air Basin. The air quality management agencies in the Project area include the US Environmental Protection Agency (USEPA), California Air Resources Board (CARB), El Dorado County Air Quality Management District (EDCAQMD) and TRPA. The USEPA establishes National Ambient Air Quality Standards (NAAQS) for which the CARB and EDCAQMD have primary implementation responsibility.

The EDCAQMD administers air quality regulations developed at the federal, state and local level and publishes the CEQA Guide to Air Quality Assessment (El Dorado County) to provide guidance regarding assessment of air quality impacts under CEQA. The analysis of potential Project air quality impacts utilizes this guidebook.

TRPA implements its own set of air quality standards and ordinances, including eight air quality standards and indicators adopted to protect air quality in the Lake Tahoe Air Basin. The 2017 TMPO RTP/SCS establishes policies, project implementation plans, and funding strategies to shape the Tahoe Region's transportation network so that environmental goals and thresholds are met. The RTP/SCS includes an analysis of its conformity with the California State Implementation Plan (SIP) to ensure that the RTP remains consistent with state and local air quality planning efforts to achieve and/or maintain the National Ambient Air Quality Standards (NAAQS).

TRPA Code provisions establish regulatory controls to implement Regional Plan policies. Code provisions relevant to the project include Code Chapter 65 which establishes air quality control requirements to aid in the implementation of TRPA air quality goals and policies for the purpose of attaining and maintaining applicable federal and state air quality standards and TRPA thresholds.

<u>U.S. Environmental Protection Agency (USEPA) and California Air Resources Board (CARB).</u> The federal Clean Air Act (CAA), enacted in 1963 and amended several times thereafter (including the 1990 amendments), establishes the framework for modern air pollution control. In response to the CAA, federal and state governments have established ambient air quality standards for seven criteria pollutants, all of which occur in the LTAB: ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter less than or equal to 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and lead (Pb). Air quality regulations focus on the following air pollutants because these are the most prevalent air pollutants known to be deleterious to human health and extensive health-effects criteria documents are available, they are commonly referred to as "criteria air pollutants." Monitoring stations are located at the South Lake Tahoe Airport (1901 Airport Road South Lake Tahoe CA 96150), South Lake Tahoe–Sandy Way (3337 Sandy Way, South Lake Tahoe CA 96150), and Truckee (10046 Donner Pass Road, Truckee CA 96161).

National and California ambient air quality standards (NAAQS and CAAQS, respectively) are listed on the California Air Resources Board website (https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards). Given the unique climatic conditions within the Lake Tahoe Air Basin, the TRPA has established a standard for 8-hour CO (6 ppm (7 mg/m3)), which is more stringent than both state and national regulations.

Ozone and NO₂ (an ozone precursor) are considered regional pollutants because they affect air quality on a regional scale; oxides of nitrogen (NO_X), including NO₂, react photochemically with reactive organic gases (ROG) to form ozone some distance downwind of the source of pollutants. Pollutants such as CO, PM_{10} , and $PM_{2.5}$ are local pollutants because they tend to disperse rapidly with distance from the source. PM_{10} , and $PM_{2.5}$ are regional pollutants that travel and impact downwind areas.

The LTBMU Forest Plan provides the basis for evaluating the project's impact on air quality under NEPA. An air quality goal in the Forest Plan includes "maintaining and, where necessary, restoring the clear, clean air important to the aesthetic enjoyment of the area and the health of the people." Most of the forest management practices and forest wide standards and guidelines contained in the LTBMU Forest Plan pertain to emission sources in wilderness areas, fire protection and prevention practices, fuels treatment, and prescribed burn practices. These issues are not directly relevant to the Project and are not further addressed.

Environmental Analysis and Mitigation Measures

3.4.5-1. Would the Project conflict with or obstruct implementation of the applicable air quality plan? (CEQA IIIa)

<u>Standard of Significance</u>: A significant impact occurs if the Project conflicts with standards identified by the EDCAQMD or in the 2017 RTP/SCS.

Environmental Analysis: Less than Significant Impact.

The Project would utilize TRPA Air Quality Mitigation Funds and funds from the Congestion Mitigation and Air Quality (CMAQ) Program and has the potential to improve air quality in the area when individual motorized vehicle trips are replaced with bicycle and pedestrian trips. The Project supports the 2017 RTP/SCS by connecting neighborhoods separated by the Upper Truckee River and expanding connections to existing Bike Routes, lanes, and trails in the area. This Project is listed in the 2017 RTP/SCS as project # 03.01.02.0040. TRPA's 2017 Regional Transportation Plan: Linking Tahoe (RTP) includes an analysis of its conformity with the California State Implementation Plan to ensure that the RTP remains consistent with State and local air quality planning work to achieve and/or maintain the national ambient air quality standards (NAAQS). The Project would not alter or revise the regulations pertaining to air quality.

The Lake Tahoe Region is in attainment or designated as unclassified/attainment for all National Ambient Air Quality Standards (NAAQS) and is designated nonattainment for the PM_{10} California ambient air quality standards (CAAQS). The Project has the potential to produce air pollutant emissions during project construction but also has the potential to reduce area emissions during operations by encouraging non-motorized trips.

Short-Term Construction Emissions

Construction emissions are described as short-term or temporary in duration. Reactive Organic Gases (ROG), Carbon Monoxide (CO) and Nitrogen Oxides (NOx) (ozone precursors) emissions are primarily associated with gas and diesel equipment exhaust and the application of architectural coatings. Fugitive dust emissions (PM_{10} and $PM_{2.5}$) are primarily associated with site preparation and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage or disturbance area, and vehicle travel by construction vehicles on- and off-site.

Construction activities would result in the temporary generation of ozone precursor and fugitive dust emissions from site preparation; off-road equipment, material import/export, worker commute exhaust emissions; paving; and other miscellaneous activities. Typical construction equipment includes dozers, graders, excavators, loaders, and trucks. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities.

As part of the TRPA RPU mitigation to reduce construction-generated emissions, TRPA adopted additional best construction practices policies. In Section 65.1.8.A. (Air Quality/Transportation, Idling Restrictions) of the TRPA Code of Ordinances, a new subsection was added that limits construction vehicle idling time to 15 minutes in Nevada and 5 minutes in California (previous restriction was 30 minutes). In addition to reduced idling time policies, the TRPA Standard Conditions of Approval for Grading Projects (TRPA Permit Attachment Q) includes new construction provisions that call for the use of existing power sources (e.g. power poles) or clean-fuel generators rather than temporary diesel power generators wherever feasible, location of construction staging areas as far as feasible from sensitive air pollution receptors (e.g. schools or hospitals), closure of engine doors during operation except for engine

maintenance, location of stationary equipment (e.g. generators or pumps) as far as feasible from noisesensitive receptors and residential areas, installation of temporary sound barriers for stationary equipment, and use of sonic pile driving instead of impact pile driving, wherever feasible. As identified in Section 2.6.3 above, best management practices will be required to comply with EDCAQMD rules including, but not limited to, the following:

- Implement measures recommended by the El Dorado County Air Quality Management District.
- Prohibit open burning of debris from site clearing unless involved with fuels reduction project.
- Utilize low emission construction equipment and/or fuels and use existing power sources (e.g., power poles), wherever feasible.
- Restriction of idling of construction equipment and vehicles.
- Apply water to control dust as needed to prevent dust impacts offsite.

Long-Term Operational Emissions

Although periodic maintenance may occur on or along the trail, the use of the trail would not result in long-term operational emissions and has the potential to reduce area air emissions by replacing motorized vehicle trips with bicycle and pedestrian trips. Additionally, paving a dirt trail has the potential to reduce fugitive dust generated by walking or biking over dirt trails.

Required Mitigation: None.

3.4.5-2. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (CEQA IIIb)

<u>Standard of Significance:</u> A significant long-term (e.g. operational) impact results if the Project causes violations of air quality standards or contributes substantially to an existing or projected air quality violation. As identified by CARB, the EDCAQMD, and TRPA, a significant short-term (e.g., construction related) air quality impact results if construction-generated emissions of ROG, NO_X, PM₁₀ (particulate matter less than 10 microns in size), or SO₂ exceed mass emissions of 82 lb/day, or construction-generated emissions of CO (carbon monoxide) exceed mass emissions of 550 lb/day.

Environmental Analysis: Less than Significant Impact.

The Region is designated non-attainment for PM_{10} , as presented in Table 3.4.5-2. A significant cumulative impact results if the Project causes a considerable increase in PM_{10} .

Table 3.4.5-2: Federal and State Attainment Status for the Lake Tahoe Air Basin		
Pollutant	State Designation	National Designation
Ozone	Attainment	Unclassified/Attainment
PM10	Non-Attainment	Unclassified/Attainment
PM _{2.5}	Attainment	Unclassified/Attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	Not Applicable (NA)
Lead	Attainment	Unclassified/Attainment

Hydrogen Sulfide	Unclassified	NA
Visibility Reducing Particles	Unclassified	NA
Source: EPA 2018; CARB 2019.		

In the project area, these pollutants relate to automobile use and potential impacts measured with VMT calculations and wood burning fireplaces and stoves. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. There is potential for fugitive dust to be created during trail construction and some mobile emissions would occur during construction from the use of equipment such as pavers, graders, and other mechanical devices. While an increase in PM_{10} emissions is possible during construction, the trail will reduce operational PM_{10} emissions caused by use of the dirt utility road.

The El Dorado County Air Quality Management District (EDCAQMD) District Rule 223 includes requirements for construction projects, which the Project would implement, as discussed in Section 2.6.3 of this IS/IEC. Control measures for construction and other earth moving activities must follow the guidelines presented in Table 1 of Rule 223-1 "Best Management Practice". These requirements include, but are not limited to, creation and implementation of a Fugitive Dust Control Plan, trackout management practices at the construction site, visible emissions limitation, vehicle speed limitations, material handling, and control for stockpiles and disturbed areas. Since these BMPs would be implemented during construction, no significant impact would occur.

Operation of the trail would result in no additional emissions and may result in a beneficial impact by reducing individual vehicle trips and replacing them with non-motorized pedestrian and bicycle trips that do not produce emissions.

The project is consistent with the Regional Plan, and implementation of the Project would result in a long-term reduction in emissions of ozone precursors. Because the increase in emissions of PM associated with construction would be below the project-level increment considered significant by TRPA (82 lb/day), the amendment would not be anticipated to lead to nonattainment of air quality standards.

Required Mitigation: None.

3.4.5-3. Would the Project expose sensitive receptors to substantial pollutant concentrations? (CEQA IIIc)

<u>Standard of Significance:</u> A sensitive receptor defines a location where human populations, especially children, seniors, and sick persons are found with a reasonable expectation of continuous human exposure according to the averaging period for ambient air quality standards. Typical sensitive receptors include residences, hospitals, and schools. A significant impact results from increases in CO that cause exceedance of NAASQS and CAAQS and diesel exhaust emissions (DPM) (note that there is no quantitative threshold for DPM).

Environmental Analysis: Less than Significant Impact.

The nearest sensitive receptors to this Project are residences located along the Class 3 Bike Route portion of the Project. The Lake Tahoe Environmental Science Magnet School is located approximately 200 feet from the Class 3 portion of the trail at Apache Avenue.

<u>Short-term.</u> Construction of the Project results in short-term emissions of air pollutants from temporary ground disturbance associated with site excavation, grading, paving, construction equipment exhaust operating at the construction site, construction worker vehicles and supply trucks, and from traffic impacts resulting from construction worker vehicle and construction equipment movements along streets. These emissions are temporary and localized and cease once construction activities have been completed in the specific project area location. Construction creates short-term DPM, which are toxic air contaminants (TACs), from on-site heavy-duty equipment. Project construction generates DPM emissions from the use of off-road diesel equipment required for construction activities.

Exposure of sensitive receptors is the primary factor used to determine health risk. Exposure is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. A longer exposure period results in a higher exposure level. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project. Thus, the duration of the proposed construction activities (approximately 4 months) constitutes a small percentage of the total 70-year exposure period. DPM from construction activities are not anticipated to result in the exposure of sensitive receptors to levels that exceed applicable standards and it is not anticipated that the construction of the Project results in significant short-term impacts to sensitive receptors.

<u>Long-term.</u> The Project, as a non-motorized transportation feature, introduces no new emission sources associated with use of the trail and thus creates no impact to sensitive receptors. Implementation of the Project results in no vehicle delay or queuing and has the potential to reduce vehicle traffic in the area, thereby resulting in a beneficial impact. The long-term operation of the Project results in no sources of toxic air emissions and no increase in existing 24-hour air quality emissions. As a result, the Project will not expose sensitive receptors to substantial TAC emissions and the impact is less than significant.

Required Mitigation: None.

3.4.5-4. Would the Project result in other emissions, such as objectionable odors, adversely affecting a substantial number of people? (CEQA IIId)

<u>Standard of Significance:</u> A significant impact results if Project construction or operation creates objectionable odors affecting a substantial number of people.

Environmental Analysis: Less than Significant Impact.

The occurrence and severity of odor effects depend on the nature, frequency, and intensity of the odor source, wind speed and direction, and the presence of sensitive receptors. Offensive odors rarely cause physical harm, but odors can be unpleasant and generate citizen complaints to regulatory agencies and local governments. Typical sensitive receptors include residences, hospitals, and schools. There are no hospitals located within the area; however, residences and a school are within the vicinity.

As a general matter, the types of land use development that pose potential odor problems include wastewater treatment plants, refineries, landfills, composting facilities and transfer stations, none of which are proposed or located in the Project area.

In the short-term, odor impacts occur from the use of diesel engines and asphalt concrete paving during construction. These odors are both temporary and localized, affecting only the area immediately adjacent

to the active construction area. Diesel exhaust emissions and asphalt concrete paving odors dissipate rapidly away from the source and cease upon completion of construction activities and would be addressed by the TRPA Code of Ordinances Chapter 65 (Air Quality/Transportation) idling restrictions. Implementation of the Project would not result in substantial direct or indirect exposure of sensitive receptors to offensive odors.

Required Mitigation: None.

3.4.5-5. Would the Project result in substantial air pollutant emissions? (TRPA 2a)

Standard of Significance:

Environmental Analysis: No Impact

See analysis for Question 3.4.5-1.

Required Mitigation: None.

3.4.5-6. Would the Project result in deterioration of ambient (existing) air quality? (TRPA 2b)

Standard of Significance:

Environmental Analysis: No Impact.

See analyses for Question 3.4.5-1, which conclude a less than significant impact and Question 3.4.5-5, which concludes no impact to ambient air quality.

Required Mitigation: None.

3.4.5-7. Would the Project result in creation of objectionable odors? (TRPA 2c)

Standard of Significance:

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.5-3, which addresses the creation of objectionable odors and concludes a less than significant odor impact to short-term and long-term effects to sensitive receptors.

Required Mitigation: None.

3.4.6 Biological Resources (Stream Environment Zones, Wetlands, Wildlife and Vegetation)

This section presents the analyses for potential impacts to biological resources, including impacts to SEZs, wetlands, wildlife and vegetation. Table 3.4.6-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.6-1: Biological Resources				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.6-1. 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service? (CEQA IVa)		Х		
3.4.6-2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (CEQA IVb)		Х		
3.4.6-3. 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? (CEQA IVc)			Х	
3.4.6-4. 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? (CEQA IVd)			Х	
3.4.6-5. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance? (CEQA IVe)			X	

			[
3.4.6-6. Conflict with the				
provisions of an adopted Habitat				
Conservation Plan, Natural				
Community Conservation Plan, or				Х
other approved local, regional, or				
state habitat conservation plan?				
(CEQA IVf)				
TRPA Initial Environmental	Yes	No, With	Data	No
Checklist Item		Mitigation	Insufficient	
3.4.6-7. Removal of native				
vegetation in excess of the area				
utilized for the actual development				Х
permitted by the land				28
capability/IPES system? (TRPA				
4a)				
3.4.6-8. Removal of riparian				
vegetation or other vegetation				
associated with critical wildlife				Х
habitat, either through direct				
removal or indirect lowering of the				
groundwater table? (TRPA 4b)				
3.4.6-9. Introduction of new				
vegetation that will require				
excessive fertilizer or water, or				Х
will provide a barrier to the normal				
replenishment of existing species?				
(TRPA 4c)				
3.4.6-10. Change in the diversity				
or distribution of species, or				
number of any species of plants				Х
(including trees, shrubs, grass,				
crops, micro flora and aquatic				
plants)? (TRPA 4d)				
3.4.6-11. Reduction of the				
numbers of any unique, rare or				Х
endangered species of plants? (TRPA 4e)				
3.4.6-12. Removal of streambank				
and/or backshore vegetation,				
including woody vegetation such				Х
as willows? (TRPA 4f)				
3.4.6-13. Removal of any native				
live, dead or dying trees 30 inches				
or greater in diameter at breast				
height (dbh) within TRPA's				Х
Conservation or Recreation land				
use classifications? (TRPA 4g)				
3.4.6-14. A change in the natural				
functioning of an old growth				Х
ecosystem? (TRPA 4h)				
3.4.6-15. Change in the diversity				
or distribution of species, or		Χ		
numbers of any species of animals				

(birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)? (TRPA 5a)		
3.4.6-16. Reduction of the number of any unique, rare or endangered species of animals? (TRPA 5b)	X	
3.4.6-17. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? (TRPA 5c)		X
3.4.6-18. Deterioration of existing fish or wildlife habitat quantity or quality? (TRPA 5d)		X

Environmental Setting

NCE conducted a literature and database review to identify existing biological and botanical information within and adjacent to the project area in support of a Natural Environment Study (NES) prepared for Caltrans. The purpose of the NES was to identify a list of potential special status species (SSS) and critical habitat occurring within the project area and additional one-mile radius around the project area (herein referred to as biological survey area, or BSA). Special status species include all listed biological or botanical species with special protection or consideration under federal, state, and local regulatory policies.

NCE scientists conducted reconnaissance-level surveys in order to inventory habitats, SSS, and non-SSS. Results of the NES are presented in the following subsections.

Botanical Resources

The project area contains areas of existing developed roadway and areas of natural vegetation and stream environment associated with the Upper Truckee River, including areas of landscape vegetation. Vegetation types were initially identified with the CALVEG Alliances GIS data (USDA 2020) then verified based on reconnaissance level surveys conducted by NCE in 2019. Vegetation communities present within the project area are primarily Jeffrey pine and Lodgepole pine forest. Sierran mixed conifer and sagebrush alliance are also present. There is no mapped riparian habitat associated with the Upper Truckee River (Figure 3.4.6-1). Based on field survey, a patch of willow and alder shrubs that occur on the west bank of the Upper Truckee River constitute the extent of riparian habitat within the project area. Riparian habitat is limited to this area, then rapidly grades into upland areas of lodgepole pine. As part of the project, approximately 30 lodgepole pine trees between 6-24" dbh may be removed, and the patch of willow and alder shrubs may be pruned (refer to Figure 3.4.6-2 for locations of proposed vegetation impact).

A total of 18 special status plant species were identified within a nine-quad database search in the vicinity of the project area based on the California Natural Diversity Database and the California Native Plant Society's Rare Plant Inventory. Four of the 18 species have the potential to occur within the project area due to the presence of suitable habitat (NCE 2019). The four plants are considered to be of special concern based on federal, state, or local laws regulating their protection; however, none of these species are federally listed.

Botanical surveys were conducted by NCE on June 11, 2019 and July 10, 2019 by walking the entire biological study area following California Department of Fish and Wildlife (CDFW) protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018).

No botanical SSS were identified within the project area during the field surveys (NCE 2019).

Invasive species

A database review, field survey, and Invasive Plant Risk Assessment (IPRA) was prepared for the project in July of 2019 to identify noxious and invasive species within the project area and provide treatment options, if necessary. Literature and database review included the *Sierra Nevada Forest Plan Amendment Table 1: Invasive non-native plant species occurrence in Sierra Nevada National Forest* (D'Antonio 2004); the *California Department of Food and Agriculture (CDFA) California Noxious Weed Species List* (CDFA, 2016); and the *Lake Tahoe Basin Weed Coordination Group Priority Invasive Weeds of Tahoe Basin List* (LTBWCG 2011).

The field survey resulted in the positive identification of three non-native/invasive plant species in the project survey area: sulphur cinquefoil (*Potentilla recta*), curly dock (*Rumex crispus*), and wooly mullein (*Verbascum Thapsus*). Weed species identified during the July 2019 field survey and their locations are presented in the attached IPRA report (Appendix C).

Wildlife

Special status species databases were reviewed to determine the potential for special status wildlife to occur within the area. The following site-specific references and background information was reviewed:

- California Natural Diversity Database (CNDDB). 2019. California Department of Fish and Wildlife, Sacramento, CA. Accessed online.
- Information for Planning and Conservation (IPaC). 2019. United States Fish and Wildlife Service. Accessed online.

The database review identified a total of 16 animal special status species known to occur or with the potential to occur within the BSA. Table 3 within the attached NES (Appendix D) lists all of the special status species that have potential to occur within the BSA as well as a brief rationale as to the possible presence or absence of the species within the project area. Of these species with potential to occur within the BSA, four avian species have the potential to occur within the project area itself due to the presence of suitable habitat, elevation, and other factors.

Legend CWHR Type Barren Jeffrey pine Lacustrine Lodepole pine Montane chaparal Montane riparian Perennial grassland Sagebrush Sierran mixed conifer Urban NCE San Bernardino Class I Bike Trail Project 1 in. = 500 ft. **CWHR** Vegetation Communities 250 JOB NUMBER DRAWN DATE APPROVED SOURCE REVISED 1/15/2020 California Wildlife Habitat Relationship GIS data 501.34.25 sanderson drios

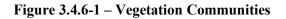


Figure 3.4.6-2 – Proposed Tree Removal



Avian Species

Database review identified four avian SSS that have potential to occur within the project area due to the presence of suitable habitat. These species include the Olive-sided flycatcher, Rufous hummingbird, Williamson's sapsucker, and the Northern goshawk. None of these species were identified during two separate field surveys (NCE 2019). Additionally, it was determined based on a review of habitat present within the project area that suitable habitat exists for the yellow warbler (*Setophaga petechia*), a Tahoe Regional Planning Agency special interest species and CDFW Species of Special Concern.

A brief summary of the surveys and habitat assessment conducted for the avian SSS as documented in the NES are as follows:

Olive-sided flycatchers: These birds frequent coniferous forests, especially with tall standing trees. They are strongly associated with spruce, fir, pine, or mixed woodland near edges and clearings. The USFS land within the proposed path alignment could potentially harbor this species due the prevalence of foraging and singing perches located in a recently thinned forest. These birds were not observed or heard during two separate surveys.

Rufous hummingbird: This species typically breeds north of the Sierra Nevada and at lower elevations than the project area elevation. They could potentially be found in the project area foraging on their migration flights north or south. These birds are attracted to colorful tubular flowers including paintbrush, columbine, and larkspur. These birds were not observed or heard during two separate surveys.

Williamson's sapsucker: These birds are year-round residents of the Sierra Nevada that prefer high elevation conifer forests. They nest in tree cavities, usually in pine, fir, or aspen. Nests are found 5 to 60 feet above ground level and are usually found in trees with a living outer layer and dead heartwood. They feed on sap from tiny holes drilled in bark that excrete sap. Insects and some small fruits are also part of their diet. These birds could be foraging in the project area but were not observed or heard during any surveys.

Northern Goshawk: These birds can be year-round residents or migratory depending on their prey population size and distribution. They typically construct nests in large conifer trees just below canopy level, often in the largest tree in the stand. Foraging goshawks move rapidly through the forest, perch to perch, punctuated with brief periods of prey searching. Northern goshawks hunt by flying rapidly along forest edges, across openings, and through dense vegetation to surprise prey. Easily startled by human activity, northern goshawks prefer to forage near intact large forests. These birds could pass through the project area, but low-quality habitat within and nearby the project area suggest breeding and primary foraging will occur elsewhere. Northern goshawks were not observed (including nests) or heard during the reconnaissance-level surveys.

Yellow Warbler: This species occurs in California principally as a migrant and summer resident. Yellow warblers generally occupy riparian vegetation in close proximity to water along streams and wet meadows. Their diet consists of over 90% insects. Habitat for yellow warbler is limited within the project area; however, there is potential for the species to nest within the patch of willow and alder on the bank of the Upper Truckee River. Yellow warbler was not observed during the reconnaissance-level surveys.

Wildlife Corridors

A wildlife corridor is an area of habitat connecting wildlife populations and larger areas of similar wildlife habitat. These corridors generally consist of native vegetation and allow wildlife species to find

water, food, shelter, and potential mates. Corridors enable the movement of animals and the continuation of viable populations, thus playing a role in the maintenance of biodiversity.

The project area includes portions of a wildlife corridor between the Lake Baron parking lot and the southern section of East San Bernardino Avenue. However, the project improvements will have little to no impact on the wildlife corridor due to the path not obstructing the movement of animals and the proposed path not altering the existing condition in any meaningful way.

The Upper Truckee River is a known corridor for two federally listed species, including the federally threatened Lahontan cutthroat trout (LCT) and the federally endangered Sierra Nevada yellow-legged frog (SNYLF). Based on potential suitable habitat for the two federal Endangered Species Act (ESA)-listed animal species, surveys were conducted for SNYLF and LCT within the project area (additional discussion is provided in the subsections below). After two surveys, neither of these species were observed in the project area (NCE 2019).

Sierra Nevada Yellow-Legged Frog

The U.S. Fish and Wildlife Service (USFWS) has designated critical habitat for SNYLF, which was listed in 2014 as threatened under the federal Endangered Species Act. In addition, the US Forest Service (USFS) Lake Tahoe Basin Management Unit has developed a SNYLF Suitable Habitat layer. The project area is outside of the USFWS designated critical habitat for SNYLF; however, the area does overlap the USFS Suitable Habitat layer (Figure 3.4.6-3).

A SNYLF Site Assessment was conducted by NCE in 2019 to assess the potential for suitable habitat within the project area and assess the potential project impacts to the species. As part of the assessment, two Visual Encounter Surveys (VES) were performed by NCE along the shoreline of the Upper Truckee River where potential suitable habitat exists for the species, and where the bridge structure is proposed. An additional 100 feet on either side of the proposed bridge crossing were surveyed. The river and shallow areas were also scanned for the presence of any individuals. While the Upper Truckee River and nearly all wet areas in the Lake Tahoe basin have been identified as suitable habitat for SNYLF, no SNYLF were observed following the two visual encounter surveys (NCE 2019).

The SNYLF Site Assessment is included as Appendix E.

Lahontan Cutthroat Trout

The project area contains potential habitat for the LCT within the Upper Truckee River. The LCT is listed as threatened under both federal and California endangered species laws. There is no critical habitat designation for this species. Additionally, no Essential Fish Habitat was identified within the project area (NCE 2019).

The LCT have been extirpated from 95 percent of their habitat in California. The introduction of nonnative trout, logging, mining, road and railroad building, human land use activities, and commercial harvest of this species rapidly reduced the distribution and abundance of this species. The only high elevation, self-sustaining population of LCT known in the Sierra Nevada range is located near Meiss Meadows (USDA 2015). LCT generally occur in cool flowing water with available cover and wellvegetated, stable stream banks, in areas where there are stream velocity breaks, and in relatively silt free, rocky riffle-run areas (Purdy et al., 2014).





Two reconnaissance-level surveys were conducted by NCE on June 11 and July 10, 2019; no LCT were observed during these survey efforts (NCE 2019). Results of LCT habitat assessment conducted as part of the NES indicate that the Upper Truckee River in the project area likely does not contain sufficient habitat to support the species due to several factors, including presence of a large amount of non-native trout, high stream velocities and eroded cut banks within the project area, and lack of vegetative cover (NCE 2019).

Aquatic Resources

An aquatic resources delineation was conducted by NCE wetland specialists in July of 2019 to evaluate if potential jurisdictional of waters of the United States (WOUS) are located within the project area. In total, there are four drainages within the project area that are potentially jurisdictional under Section 404 of the Clean Water Act and are additionally waters of the state of California (NCE 2019). No wetlands or other special aquatic features (seeps, springs) were identified within the project area.

Three of the delineated features contain existing culverts and are potentially jurisdictional waters of the U.S. due to their connection to the Upper Truckee River, which is a tributary to Lake Tahoe, a Traditional Navigable Waterway. NCE also delineated the section of Upper Truckee River that is located within the project area. Within the project area, the ordinary high-water mark of the Upper Truckee River is approximately 111-feet wide (Figure 3.4.6-4). The full Aquatic Resources Delineation Report is included as Appendix F.

Stream Environment Zones

The TRPA Code of Ordinances defines SEZ as, "Generally an area that owes its biological and physical characteristics to the presence of surface or ground water." This definition includes perennial, intermittent, and ephemeral streams; wet meadows, marshes, and other wetlands; riparian areas, beaches, and other areas expressing the presence or influence of surface or ground water. The TRPA regulates SEZ within the Tahoe Basin under the Clean Water Act's 208 Plan program.

Most of the project alignment is mapped as SEZ (TRPA Land Capability Class 1B) (Figure 3.4.6-5); however, this SEZ has not been verified by TRPA. Additionally, the results of the field survey and habitat assessment indicate the presence of primarily upland species within the project area (NCE 2019).

Regulatory Setting

Special Status Species

State and federal "endangered species" legislation provides the CDFW and the USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status."



Figure 3.4.6-4 – Upper Truckee River Ordinary High Water Mark and Bridge Footing Locations

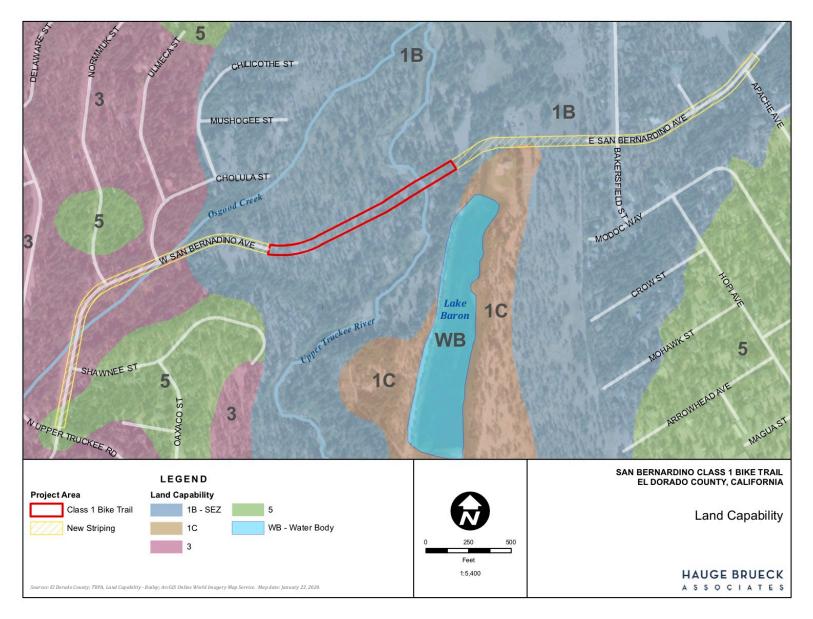


Figure 3.4.6-5 – TRPA Land Capability District Map

Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the "take" of a listed species, including migratory birds. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 United States Code [U.S.C.], Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are Trustee agencies under CEQA. Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

Special Status Habitats

Federal

The Clean Water Act (CWA), passed in 1972, regulates and protects surface water quality across the United States. Sections 401 and 404 relate directly to local agency planning. Section 401 of the CWA requires a State Water Quality Certification for all federal permit or license applications for any activity that may result in a discharge to a water body to ensure compliance with state water quality standards. Most Certifications are issued in connection with section 404 permits for dredge and fill discharges (City of Richmond 2012).

The USACE regulates dredge and fill activities within waters of the United States, including wetlands (WOUS) under the CWA Section 404 program. The extent of jurisdiction within drainage channels is defined by the "ordinary high-water mark" on opposing channel banks. All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE. This program requires that all projects impacting jurisdictional WOUS incorporate mitigation to result in 'no net loss' of size, function, and values of the aquatic resource.

State

Any entity applying for a Federal Section 404 permit must also comply with Section 401 of the CWA, requiring the applicant to receive certification from the State Water Board that the actions will comply with state water quality standards.

The CDFW is responsible for protecting and conserving fish and wildlife resources, and the habitats upon which they depend. Section 16002 of the California Fish and Game Code requires that the CDFW review any project 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.

Under the Lake and Streambed Alteration (LSA) Program, entities are required to notify the CDFW of proposed impacts through an LSA Notification. If it is determined by the CDFW that the activity, as described in an LSA Notification, will substantially alter a river, stream, or lake, and may substantially adversely affect existing fish or wildlife resources, then an LSA Agreement must be prepared. The LSA Agreement includes necessary mitigation measures to protect fish and wildlife resources from significant impacts.

Local - Tree Removal

The TRPA Code of Ordinance regulates the removal of trees under Code Section 33.6.5. The Code also provides requirements for retained tree protection during construction, soil and vegetation protection standards during tree removal, and prevents tree removal within SEZ unless certain conditions are met.

Environmental Analysis and Mitigation Measures

3.4.6-1. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (CEQA IVa)

<u>Standard of Significance:</u> The loss of greater than zero endangered, threatened, or rare fish or wildlife individuals or disturbance of greater than zero acres of occupied or designed critical habitat constitute a significant impact as defined by CEQA Article 5, Section 15065, CESA Sections 2062 and 2067, CDFG Code Sections 1900-1913, and TRPA Thresholds; or a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Environmental Analysis: Less than Significant Impact with Mitigation Measures.

As discussed in the Environmental Settings section, the project area was assessed for the presence of any threatened, endangered, or special status species that may occur in the project area.

Wildlife

All species protected under the TRPA, USFS, USFWS, and the CDFW were evaluated for the project area using CWHR, CNDDB, additional background research, and on-site investigations. As discussed in the Environmental Setting, the Upper Truckee River supports potential suitable habitat for the SNYLF and the LCT. Activities associated with the project occurring near potential suitable habitat for these species includes construction of the proposed bridge structure over the Upper Truckee River, and the boardwalk approach sections to the bridge. However, the bridge structure (including required abutments and support footing) and boardwalk approaches have been designed specifically to avoid impacting the bed, banks, or channel of the river. The following assessments for SNYLF and LCT were conducted as part of the project NES, and detail the potential for project impacts to the protected species and/or their habitats.

Sierra Nevada Yellow Legged Frog

The project proposes to construct a bridge structure across the Upper Truckee River in an area mapped by the USFS as suitable habitat for SNYLF. The project area is outside of USFWS designated critical habitat area for the species.

Based on results of the SNYLF Site Assessment, field survey, and habitat assessment, SNYLF is not anticipated to occur within the project area. As discussed in the Environmental Setting section, no SNYLF were identified during two VES efforts. Flow rate within the Upper Truckee River and lack of other habitat requirements make it unlikely for the species to utilize the area for breeding or foraging (NCE 2019). Additionally, the presence of introduced predatory fish in the Upper Truckee River system have "eliminated or reduced mountain yellow legged frog population frogs in stocked habitats" which

precludes successful breeding of SNYLF in the Upper Truckee River (USFWS 2014). Based on these factors, NCE has determined that the project area does not contain suitable habitat for the species.

Because the Upper Truckee River within the project area has been determined to not support suitable habitat for the species, and due to the fact that the project has been designed such that the bridge structure would be constructed to avoid directly impacting the Upper Truckee River banks and channel, the project is anticipated to have no impact on SNYLF.

Lahontan Cutthroat Trout

As discussed in the Environmental Setting, the Upper Truckee River contains potential habitat for LCT. As part of the NES, NCE conducted two reconnaissance-level field surveys and conducted a habitat assessment for the Upper Truckee River to determine if suitable habitat is present within the project area. No LCT were observed during the two survey efforts.

It was determined that the Upper Truckee River within the project area does not contain suitable habitat for the species. First, the Upper Truckee River contains a large amount of predatory, non-native species that are highly predatory on young LCT, making their reproductive success extremely difficult. Also absent from the project area are key habitat factors including available cover, velocity breaks, and well-vegetated stable stream banks (NCE 2019).

Based on survey efforts, habitat assessment, and due to the bridge being specifically designed to avoid placement of footings or abutments within the river channel, the project is anticipated to have no impact on LCT.

Avian Species and Migratory Birds

As discussed in the Environmental Setting, five avian SSS may have potential to occur within the project area due to the presence of suitable habitat. None were observed during two separate survey efforts (NCE 2019); however, noise and vibration associated with general construction activities, and tree removal, could result in potentially significant impacts to special status avian (including migratory bird) species should they be present during construction. The project area does not contain suitable habitat for the willow flycatcher; therefore, any potential trimming of willow required for bridge construction would have no impact on this species.

The Migratory Bird Treaty Act makes it unlawful to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid Federal permit. California Fish and Game Code Section 3500 also prohibits the destruction of any nest, egg, or nestling.

Implementation of **Mitigation Measure BIO-1** would reduce the potential impact to special status avian species (including migratory birds) to less than significant by requiring that pre-construction surveys be conducted and establishing appropriate construction avoidance buffer zones, if required.

Botanical Resources

As discussed in the Environmental Setting, no special status botanical species were identified during field surveys. Based on the urbanized nature and history of ground disturbance within the project area, it is unlikely that any SSS would occur within or adjacent to the project area in the future (NCE 2019). Since no special status plant species were identified within the project area, and are unlikely to occur there in the future, there would be no impact to botanical SSS.

Invasive Species

As discussed in the Environmental Setting, three non-native/invasive plant species were identified within the project area during field survey: sulphur cinquefoil (*Potentilla recta*), curly dock (*Rumex crispus*), and wooly mullein (*Verbascum Thapsus*). Weed species identified during the July 2019 field survey and their locations are presented in the attached IPRA report (Appendix C).

Executive Order 13112 requires federal agencies to combat the introduction or spread of invasive species in the United States. Invasive species are defined as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Noxious weeds are defined in Title 3, Division 4, Chapter 6, Section 4500 of the California Code of Regulations and the California Quarantine Policy – Weeds.

The IPRA report (NCE 2019) contained in Appendix C, recommends implementation of BMPs in order to prevent the spread of invasive and noxious weeds during construction. Construction control measures will be implemented as part of the project (see section 2.6.3) to protect against the introduction and spread of invasive species during construction.

As detailed in the IPRA, use of the above BMPs would address the risk of spread or introduction of invasive species, and additional mitigation would not be required.

Required Mitigation: BIO-1. Pre-Construction Avian Survey

The County or approved construction contractor shall retain a qualified biologist, as determined by TRPA or CDFW, to conduct a pre-construction survey of the project area to include a 100-foot buffer, as access is available, to locate active bird nests, identify measures to protect the nests, and locate any other special status species. The pre-construction survey shall be conducted no more than 14 days prior to the implementation of construction activities (including staging and equipment storage). Any special status species shall not be disturbed unless under the direction provided by a qualified biologist. If an active nest is found during construction, disturbance should not occur until young have fledged or under the direction provided by a qualified biologist.

3.4.6-2. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (CEQA IVb)

<u>Standard of Significance</u>: Direct or indirect impact greater than zero acres for State or Federal sensitive natural communities, and direct or indirect impact greater than zero acres to SEZ including riparian habitat constitute a significant impact.

Environmental Analysis: Less than Significant Impact with Mitigation.

Riparian

As discussed in the Environmental Setting, the only riparian vegetation present within the project area is an isolated patch of willow and alder shrubs that occur on the west bank of the Upper Truckee River, surrounded by upland habitats. Trimming of the existing shrubs in this location may occur to allow for construction of the bridge span and footing placement. The project does not propose to remove willow or alder species. The project area does not contain suitable habitat for willow flycatcher; there would be no impact to this species as a result of potential willow trimming. As discussed in Question 3.4.6.2 above, Mitigation measure BIO-1 would ensure that impacts to any potentially nesting birds will be avoided. Additionally, the bridge has been specifically designed to span the width of the Upper Truckee River channel; therefore, potential impact to riparian habitat would be less than significant and would not require permitting or mitigation of impacts under Section 1602 of the CDFG Code.

Stream Environment Zone

New disturbance and land coverage in the SEZ (LCD 1B)/100-year floodplain is necessary to construct the Class 1 trail, install boardwalk approaches to the bridge, and construct the bridge structure over the Upper Truckee River. Overall, the project incorporates design features that reduce disturbance and the effects of disturbance, including use of raised boardwalk bridge approaches and a bridge span. Section 2.6.1 in the project description describes these features. These design options minimize disturbance in the SEZ and floodplain by confining users to structured trails particularly during wet conditions, accommodating seasonal surface flows and high groundwater, and allowing for some vegetative cover under boardwalks. Use of pier footings to raise the structures also minimizes total coverage required to construct the trail.

Both TRPA and Lahontan prohibit new SEZ disturbance except for limited uses, such as public service and public recreation, that can demonstrate compliance with restrictive findings. The project proposes the Class I Trail, boardwalk, and bridge features that result in 13,080 sf of new land coverage within the Upper Truckee River floodplain SEZ (LCD 1B), as outlined below. As discussed in Geology, Section 3.4.9, the project complies with required findings and results in an overall reduction in SEZ disturbance by providing restoration in the amount of 1.5/1 times the disturbance calculated for the Project.

Feature	Coverage (square feet)
Class 1 Trail	9,000 SF
Boardwalk	3,600 SF
Bridge (2 abutments and footing)	480 SF
Total New Coverage	13,080 SF

Total proposed new coverage within SEZ 1B is as follows:

Under the provisions of the 2014 Regional Plan Update, TRPA exempts certain shared-use trail projects from land coverage calculations, provided that they include offsetting SEZ restoration (TRPA Code 30.4.6.D.3), if findings can be made. Lahontan Basin Plan prohibitions for discharge in SEZ and 100-year floodplains (Prohibitions 5.2 and 5.3) includes exceptions to those prohibitions for outdoor recreation projects. Exemptions from Prohibitions 5.2 and 5.3 may be granted for public outdoor recreation facilities if findings can be made. Please see the analysis under Impact Question 3.4.9-7 for a discussion of these findings. As documented in the analysis and findings, the Project is exempt from TRPA land coverage requirements for SEZ, and will mitigate the new Class 1 bike trail and bridge disturbance by providing offsetting SEZ restoration in the amount of 1.5/1 as required under TRPA Code and the Lahontan Basin Plan. The details of this requirement is outlined in Mitigation Measure GEO-1 (see details in Section 3.4.9-7).

Required Mitigation: GEO-1. SEZ Restoration Credit for New Trail Disturbance

3.4.6-3. Would the Project 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? (CEQA IVc)

<u>Standard of Significance:</u> Greater than zero acres and/or zero linear feet of disturbance or discharge to wetlands as defined by Section 404 of the CWA through direct removal, filling, hydrologic interruption or other means constitutes a significant impact as defined by the USACE jurisdictional waters regulations, 404 CFR 230 Section 404(b)(1), CDFG Section 1600 et seq, and USEPA and State of California no net loss policies.

Environmental Analysis: Less Than Significant Impact with Mitigation.

As discussed in the environmental setting section, an aquatic resources delineation was conducted for the project area. Potentially jurisdictional drainages under Section 404 of the Clean Water Act (CWA) were identified in the project area. The project does not include bridge or support features within the river channel. The project may require that one of the existing culverts within a potentially jurisdictional feature be replaced in order to provide for drainage functionality and protect the trail from potential stormwater impacts, thus potentially affecting a jurisdictional waterway.

Placement of fill within this feature could be a potentially significant impact and would require permitting pursuant to sections 401 and 404 of the CWA or California Department of Fish and Game Code Section 1602. With implementation of **Mitigation Measure BIO-2**, which outlines requirements for obtaining applicable permits pertaining to impact of waters of the US and state of California, the impact would be mitigated to less than significant.

No other impacts are proposed to potentially jurisdictional features within the project area, including the Upper Truckee River.

Required Mitigation: **BIO-2: Section 404/401 Permit Compliance**

Prior to construction, the County shall apply for and obtain a U.S. Army Corps of Engineers Section 404 CWA permit for proposed impacts to a water of the U.S., including applicable permits from the state of California, including a Section 401 permit from the Lahontan Regional Water Quality Control Board and California Department of Fish and Game Code Section 1602 (Lake or Streambed Alteration Agreement), if applicable. These permit applications establish appropriate mitigation measures that protect against significant impacts to waters of the U.S., waters of the State, and their associated habitats.

3.4.6-4. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (CEQA IVd)

<u>Standard of Significance</u>: A significant impact results from the blockage, disruption or impedance of use of greater than zero wildlife or fish corridors or native wildlife nursery sites, as defined by TRPA Code Chapters 62 and 63.

Environmental Analysis: Less than Significant Impact.

As discussed in the Environmental Setting, the project area contains the Upper Truckee River, a known wildlife corridor. As discussed in Question 3.4.6-1., it has been determined through field survey and habitat assessment that the Upper Truckee River within the project area does not contain suitable habitat

for either the LCT or SNYLF. The project would not adversely affect fish passage in the Upper Truckee River as the bridge is designed specifically to avoid construction within the river channel.

Additionally, it is possible for migratory species such as birds and mammals to passively use the area; however, the project does not propose to modify any existing undeveloped land areas or install structures in a manner that would impede potential migration of mammals. As provided in Mitigation Measure BIO-1, the project will be surveyed for migratory birds nesting in the project area prior to construction to prevent significant impacts to a migratory bird species during construction; therefore, additional mitigation for migratory birds would not be required and impacts would be less than significant.

Required Mitigation: None.

3.4.6-5. Would the Project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance? (CEQA IVe)

<u>Standard of Significance:</u> If the Project conflicts with goals and policies outlined in the conservation element of the TRPA Regional Plan for vegetation, wildlife and/or fisheries a significant impact results to biological resources.

Environmental Analysis: Less than Significant Impact.

Within the project area, approximately 30 lodgepole pine tree species, ranging from 6 to 24-inches in diameter at breast height (dbh), would be removed during construction of the trail in unverified mapped LCD 1B (SEZ). Additionally, a small cluster of willow and alder shrubs may be pruned to allow for construction of the bridge span over this Upper Truckee River area. Refer to Figure 3.4.6-2 in the Environmental Setting for locations of proposed tree removal.

Tree protection measures implemented as part of the project would include the use of temporary four-foot tall fencing around tree driplines and eight-foot tall wooden tree trunk protection as shown on Plan Sheet EC-2 (Appendix A). The use of tree trunk protection, rather than fencing around tree driplines would only be used in areas where use of fencing around the driplines would prohibit construction access.

Tree protection will follow the standards in TRPA Code of Ordinances Section 33.6.10. Tree removal will be done in accordance with TRPA Code Section 61.1. Tree removal activities will be conducted in accordance with TRPA Code of Ordinances Section 61.1.6., particularly TRPA Code Section 61.1.6C *Tree Cutting within Stream Environment Zones:* tree cutting within SEZs may be permitted to allow for early successional stage vegetation management, sanitation salvage cuts, fuels management for fire hazard reduction, restoration or enhancement of ecosystem health and diversity, and fish and wildlife habitat improvement projects, in accordance with the standards provided in the Code Section. The project would be subject to the following requirements associated with tree removal within SEZ:

- 1. Vehicle Restrictions: All vehicles shall be restricted to areas outside of the SEZs or to existing roads within SEZs.
- 2. Soil Conditions: All work within SEZs shall be limited to times of the year when soil conditions are dry and stable, or when conditions are adequate for over-snow tree removal operations without causing significant soil disturbance and/or significant vegetation damage (See subparagraph 61.1.6.F).
- 3. Trees and Debris Kept from Streams: Felled trees and harvest debris shall be kept out of all perennial or intermittent streams. If deposited in the stream, the material shall be removed unless

it is determined that such logs and woody material adds structural diversity pursuant to fish and wildlife habitat improvements in accordance with Chapter 62: Wildlife Resources, and Chapter 63: Fish Resources. This determination shall be approved by TRPA.

- 4. Stream Crossings: The crossing of perennial streams or other wet areas shall be limited to improved crossings meeting Best Management Practices or to temporary bridge spans that can be removed upon project completion or at the end of the work season, whichever is sooner. Any damage or disturbance to the SEZ associated with a temporary crossing shall be restored within one year of its removal. In no instance shall any method requiring the placing of rock and earthen material into the stream or streambed be considered an improved crossing. Other temporary measures may be permitted for dry stream crossings in accordance with the Handbook of Best Management Practices.
- 5. Special Conditions: Special conditions shall be placed on all tree harvests within SEZs or within the transition or edge zone adjoining SEZs, as necessary to protect in-stream aquatic habitat values and wildlife habitat integrity and diversity.

Because the project is required to comply with the TRPA Code pertaining to tree removal within SEZ, including implementation of required protection controls, impacts would from tree removal would remain less than significant. The project additionally would not conflict with TRPA Code pertaining to the protection of wildlife, vegetation, or fisheries as the project incorporates avoidance measures or mitigation where appropriate to comply with Code requirements.

Required Mitigation: None.

3.4.6-6. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (CEQA IVf)

<u>Standard of Significance:</u> If the Project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved habitat conservation plan, a significant impact results.

Environmental Analysis: No Impact.

The Project does 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 because no such plans exist for the project area.

Required Mitigation: None.

3.4.6-7. Would the Project result in removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system? (TRPA 4a)

<u>Standard of Significance:</u> Removal of greater than zero acres of native vegetation in excess of the area utilized for the actual development permitted by the TRPA land capability system results in a significant impact as defined by TRPA Code Chapters 30 and 33.

Environmental Analysis: No Impact.

New disturbance and land coverage are necessary within the unverified mapped LCD 1B (SEZ) to construct the Class I trail, install boardwalk approaches to the bridge, and construct the bridge structure over the Upper Truckee River. The project must comply with TRPA vegetation protection controls during construction and would only remove vegetation necessary for project implementation. Because the project would also comply with offsetting land coverage restoration requirements associated with the land capability system, significant impacts would not occur. As discussed in Question 3.4.6-2 and Question 3.4.9-7, the project is anticipated to meet the exemption conditions of TRPA Code Section 30.4.6.D.3.

Required Mitigation: None.

3.4.6-8. Would the Project result in removal of riparian vegetation other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table? (TRPA 4b)

<u>Standard of Significance</u>: The direct removal or indirect lowering of the groundwater table during Project construction or long-term operations that causes loss of riparian vegetation or other vegetation associated with critical wildlife habitat constitutes a significant impact as defined by TRPA Code Chapter 61.

Environmental Analysis: No Impact.

As described in the response to Question 3.4.6-2 in the Stream Environment Zone section, the project incorporates design features that reduce disturbance and the effects of disturbance, including use of raised boardwalk bridge approaches and a bridge span. Additionally, riparian vegetation in the project area is limited. Only potential pruning/trimming would occur; no removal of riparian vegetation is proposed. The project is required to implement a Dewatering Plan as part of the Stormwater Pollution Prevention Plan (SWPPP) to protect against SEZ impacts including those to riparian vegetation.

Required Mitigation: None.

3.4.6-9. Would the Project result in introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species? (TRPA 4c)

<u>Standard of Significance:</u> The introduction of noxious species or the introduction of new vegetation that requires excessive fertilizer or water constitutes a significant impact as defined by TRPA Code Chapter 61.

Environmental Analysis: No Impact.

As discussed in the Environmental Setting section (or project description), BMPs would be implemented to prevent the spread of invasive and noxious weeds during construction as detailed in the IPRA. The use of BMPs would address the risk of spread or introduction of invasive species, and additional mitigation would not be required.

The project does not propose to introduce new vegetation that would require fertilizer or water or provide a barrier to the normal replenishment of existing species.

3.4.6-10. Would the Project result in change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)? (TRPA 4d)

<u>Standard of Significance</u>: A change in diversity or distribution of species or number of species of plants resulting from Project construction or operations constitutes a significant impact as defined by TRPA Code Chapter 33 and 62 and 63.

Environmental Analysis: No Impact.

No special status plant species were identified within the project area. The project is required to comply with TRPA Code provisions for vegetation removal, tree removal, and revegetation. There project would therefore comply with requirements to preserve and protect existing vegetation where tree removal is not proposed. The majority of the trail would be constructed in existing disturbed road area where vegetation is not present. Therefore, the project would not result in a change in diversity or distribution of plants.

Required Mitigation: None

3.4.6-11. Would the Project result in reduction of the numbers of any unique, rare or endangered species of plants? (TRPA 4e)

<u>Standard of Significance:</u> The reduction of the number of any unique, rare or endangered species of plants as a result of Project construction and operations constitutes a significant impact as defined by TRPA Code Chapter 61.

Environmental Analysis: No Impact.

As described in the Environmental Setting, no special status plant species were identified within the project area during the 2019 surveys. The Natural Environment Study (NCE 2019) for this project contains detailed analysis for each of the special status plant species that were considered for this project. Based on the urbanized nature and history of ground disturbance within the project area, it is unlikely that any special status plant species would occur within or adjacent to the project area.

Required Mitigation: None.

3.4.6-12. Would the Project result in removal of streambank and/or backshore vegetation, including woody vegetation such as willows? (TRPA 4f)

<u>Standard of Significance:</u> TRPA revised Code Subsection 61.3.3 prohibits the removal of SEZ vegetation except as allowed by other Code provisions. Loss of riparian vegetation results in a significant impact.

Environmental Analysis: No Impact.

As discussed in Question 3.4.6-2, no removal of riparian species would occur. The existing willow and alder shrub thicket may be pruned to support construction of the trail. Impacts would be temporary, and the vegetation would be allowed to regrow after construction of the proposed boardwalk and bridge span design.

3.4.6-13. Would the Project result in removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications? (TRPA 4g)

<u>Standard of Significance:</u> TRPA Code Subsection 61.1.4 prohibits the removal of trees larger than 30inches dbh for west side forest types in lands that are in conservation or recreation plan areas except under specific Project conditions, tree removal that does not meet findings outlined in Code Subsection 61.1.4 results in a significant impact within TRPA Conservation or Recreation land use areas.

Environmental Analysis: No Impact.

As discussed in the project description, no trees larger than 30-inches dbh would be removed as part of the project; there would be no impact.

Required Mitigation: None.

3.4.6-14. Would the Project result in a change in the natural functioning of an old growth ecosystem? (TRPA 4h)

<u>Standard of Significance:</u> A change in the natural functioning of an old growth ecosystem constitutes a significant impact as determined by TRPA Code Chapter 61 and Goals and Policies.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.6-13 above. The project area does not contain any ecosystems delineated as old growth. The project will not impact or change the natural functioning of old growth ecosystems.

Required Mitigation: None.

3.4.6-15. Would the Project result in change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)? (TRPA 5a)

<u>Standard of Significance:</u> A change in the diversity or distribution of species, or numbers of any species of animals resulting from Project construction or operations constitutes a significant impact to TRPA Thresholds and TRPA goals and policies pertaining to wildlife fisheries.

Environmental Analysis: No, with Mitigation

Refer to discussion and analysis for Question 3.4.6-1. With mitigation, the project would have a less than significant impact on the distribution or numbers of species from construction impacts.

Required Mitigation: Mitigation Measure BIO-1.

3.4.6-16. Would the Project result in reduction of the number of any unique, rare or endangered species of animals? (TRPA 5b)

<u>Standard of Significance:</u> A significant impact occurs if the project results in the reduction of any TRPA designated, state, or federal special status species.

Environmental Analysis: No, with Mitigation.

See discussion and analyses for Question 3.4.6-1. Implementation of Mitigation Measure BIO-1 is required to ensure project impacts to special status avian species are reduced to less than significant.

Required Mitigation: Mitigation Measure BIO-1.

3.4.6-17. Would the Project result in introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? (TRPA 5c)

<u>Standard of Significance:</u> The introduction of new species into the project area or the blockage or disruption of fish or wildlife corridors constitutes a significant impact by the Project to the migration or movement of animals.

Environmental Analysis: No Impact

See discussion and analysis for Question 3.4.6-4 above. No new species of animals are proposed for introduction into the project area as a result of the Project. No animals, insects or invertebrate species will be introduced.

Required Mitigation: None.

3.4.6-18. Would the Project result in deterioration of existing fish or wildlife habitat quantity or quality? (TRPA 5d)

<u>Standard of Significance:</u> Deterioration of existing fish or wildlife habitat quantity or quality from construction and operations of the Project constitutes a significant impact to these habitats as defined in TRPA Code Chapters 62 and 63.

Environmental Analysis: No Impact.

Refer to Questions 3.4.6-1 and 3.4.6-4. The project area is located within an existing trail alignment and is characterized by existing human presence and use. The project does not impact wildlife corridors, and presence of SSS suitable habitat within the project area is unlikely. The design of the project avoids impacts to potential habitat where possible by following portions of existing trail, use of boardwalk and bridge span structure. The minimal vegetation and tree removal, together with the location of the proposed trail in already disturbed areas reduces the potential impact to wildlife habitat to a level of less than significant.

3.4.7 Cultural Resources (CEQA) and Archaeological/Historical (TRPA)

This section presents the analyses for potential impacts to cultural, archaeological and historical resources, discussing the Project impacts on cultural resources related to the disturbance of archaeological, historical, architectural cultural resources. The section also addresses disturbance of unknown archaeological resources. Table 3.4.7-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.7-1: Cultural Resources and Archaeological/Historical				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.7-1. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (CEQA Va)			Х	
3.4.7-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (CEQA Vb)			Х	
3.4.7-3. Disturb any human remains, including those interred outside of formal cemeteries? (CEQA Vc)			Х	
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.7-4. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building? (TRPA 20a)				X
3.4.7-5. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records? (TRPA 20b)				X
3.4.7-6. Is the property associated with any historically significant events and/or sites or persons? (TRPA 20c)				X

Environmental Setting

Project screening for cultural and historic resources as part of the San Bernardino Class 1 Bike Path project was conducted by NCE in 2019. Screening efforts consisted of an archival review, Native American tribal consultation, an intensive pedestrian survey, and recordation of any identified resources. An associated Archaeology Survey Report (ASR) was prepared by NCE to detail results of the screening efforts.

The ASR was used to support preparation of a Historic Property Survey Report (HPSR) consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (Section 106 PA), as well as under Public Resources Code 5024 and pursuant to the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92 (5024 MOU) as applicable.*

In accordance with Section 106 PA Stipulation VIII.A, the Area of Potential Effects (APE) for the project was established in consultation with Lisa Machado, Caltrans Professional Qualified Staff (PQS): PI-Historical Archaeology and Co-PI-Prehistoric Archaeology, and Ross Foon, Project Local Assistance Engineer on November 12, 2019.

Key objectives of the ASR included:

- Establishing an APE; and
- Identifying prehistoric, ethnohistoric, and/or historic period archaeological resources within or immediately adjacent to the APE

In total, 6.69 acres within the project area were surveyed. Results of the field survey indicate that the majority of the APE consists of developed roadways within an urban residential setting. Most of the top two feet of ground surface for the proposed trail alignment has been previously disturbed. The central portion of the APE consists of a highly compacted dirt road, substantial forest mastication, and evidence of past episodic channel migration (NCE 2019).

Results of the HPSR/ASR indicate that no prehistoric or historic period archaeological resources were identified within the APE. Recent (less than 50 years in age) items (roadside debris) and an architectural resource (a dirt road) were observed but are considered exempt per *Type 2* and *Type 4* exemptions as provided by Attachment 4 of the Section 106 PA (NCE 2019).

One prehistoric resource, P-09-004506, was identified adjacent to the APE. Three Native American tribes identified by the NAHC replied to inquiry letters sent by El Dorado County, and requested further project information and the records search results to determine the needs of further consultation. The Tsi Akim Maidu has deferred to the Washoe Tribe of Nevada and California for any additional follow-up or request to monitor the project. The Washoe Tribe's initial response stated there is concern for adverse impacts to archaeological resources in the APE. An electronic copy of the ASR was provided to the Washoe Tribe and UAIC for review. After reviewing the ASR, the Washoe Tribe stated are not aware of cultural resources within the project area that may be affected by the proposed project. The tribe did not have concerns about the project affecting site P-09-004506. The UAIC requested for a more intensive

pedestrian survey of the site to establish that the resource did not extend into the project APE. Upon request of the United Auburn Indian Community (UAIC), NCE conducted an additional intensive pedestrian survey for this site and verified that the resource did not extend into the project area/APE. Results of this additional survey effort were submitted back to the UAIC for concurrence. The UAIC responded that their concerns had been addressed and they had no further issues or concerns that the proposed project may impact the prehistoric site or known cultural resources. In the event inadvertent cultural resources are discovered as a result of project activities it is Caltrans policy that the Washoe Tribe and UAIC will be notified.

Details of Native American consultation in accordance with Assembly Bill 52 (AB 52) conducted for the project can be found in Section 3.4.20 - *Tribal Cultural Resources*.

Because there are no historic properties within the APE, or significant tribal cultural resources associated with the project, Caltrans issued a Finding of '**No Historic Properties Affected**' for the project.

The full Caltrans HPSR report, with the ASR attached, is included as Appendix G.

Regulatory Setting

As discussed above, an HPSR/ASR was prepared with intensive pedestrian surveys of the area, records searches, and consultation with area tribes, which meet the requirements of federal, state, and TRPA regulations and standards. The Project description includes the regulatory compliance measures integrated as part of project implementation that ensure resource protection.

The National Historic Preservation Act (NHPA) was enacted by Congress in 1966 to establish national policy for historic preservation in the United States. The NHPA establishes the role and responsibilities of the federal government in historic preservation. The NHPA directs agencies to identify and manage historic properties under their control; to undertake actions that will advance the Act's provisions and avoid actions contrary to its purposes; to consult with others while carrying out historic preservation activities; and to consider the effects of their actions on historic properties.

The California Register of Historic Resources (CRHR) is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR helps government agencies identify and evaluate California's historical resources and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change (PRC § 5024.1(a)). Any resource listed in, or eligible for listing in, the CRHR is to be taken into consideration during the CEQA process.

The California Department of Transportation (Caltrans) must comply with federal and state environmental laws and regulations designed to protect cultural resources significant in American archaeology, architecture, history, culture, and engineering. Because Caltrans must comply with federal and state laws and regulations regarding cultural resources, the same policy also forms the core of Caltrans general cultural resources policy. Caltrans *Standard Environmental Reference* (SER) (revised 2019) contains provisions for the discovery of previously unidentified cultural resources. Chapter 2 Section 2.4.4 "Post-Review Discoveries," offers guidance to assist Caltrans personnel in planning for the possibility of unexpected discovery of cultural resources and of unexpected effects on known historic properties. Chapter 3 outlines procedures that shall be followed if human remains are discovered during any Caltrans activity, in accordance with Section 7050.5 of the California Health and Safety Code. Chapter 5 outlines procedures that shall be followed if previously unidentified archaeological resources are encountered during construction:

PRC § 5097.5 prohibits excavation or removal of any "... archaeological... or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. PRC § 5097.5 states that any unauthorized disturbance or removal of archaeological or historical or sites located on public lands is a misdemeanor.

The project is subject to Section 67 of the TRPA Code of Ordinances (Historic Resource Protection). Section 67.3 - Resource Projection outlines requirements for the accidental discovery of resources during construction (subsection 67.3.1), requirements for site survey and consultation with the Washoe Tribe (subsection 67.3.2), and requirements for protection of known resources.

Environmental Analysis and Mitigation Measures

3.4.7-1. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5(a)? (CEQA Va)

<u>Standard of Significance:</u> If the Project adversely affects important examples of major periods of California history or pre-history, a significant impact results to historical resources. Impacts to eligible or potentially eligible resources include those resulting from construction, operation, or maintenance activities that adversely impact the integrity of historic resources and are unavoidable based on the Project trail placement.

Environmental Analysis: Less than Significant Impact.

As discussed in the Environmental Setting, an Archaeological Survey Report and Caltrans specific Historic Properties Survey Report were prepared for the project to document project impacts to potential cultural and historic resources of significance within the project area. Results of the ASR/HPSR efforts indicate that there are no known historic resources of concern within the project area. The historic maps and aerial imagery reviewed did not show historic roads or other features over 50 years old within the APE. No historic features were identified during the field surveys. Additionally, it was determined through the archival research that the potential for previously undiscovered subsurface historic resources to exist within the APE is low.

Implementation of federal and state regulations, Caltrans policy, TRPA Code (Chapter 67) and General Plan policies address protection of historic, cultural, and archaeological resources and provide processes to protect against significant impacts to these resources. Therefore, any potential impacts would remain less than significant and additional mitigation would not be required.

Required Mitigation: None.

3.4.7-2. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5(c)? (CEQA Vb)

<u>Standard of Significance:</u> If the Project causes "a substantial adverse change in the significance of an archaeological resource" (i.e. physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings) pursuant to PRC Section 15064.5, a significant impact results to archaeological resources.

Environmental Analysis: Less Than Significant Impact.

The proposed project has the potential for direct impacts from general construction activities and use of temporary staging areas. The project will involve excavation of earth with heavy equipment, stockpiling of material, and heavy equipment driving over the ground.

The APE consists various forms of disturbance including existing roadways and their associated shoulders, drainage ditches, and underground utilities. The Upper Truckee River within the APE also exhibits signs of disturbance due to natural and anthropogenic induced channel meandering and erosion/sediment deposition (NCE 2019). The intensive pedestrian survey conducted by NCE along the proposed location of the Class 1 path indicated high levels of previous disturbance throughout the APE associated with an unimproved utility access road. Further from the San Bernardino roadway, there was evidence of previous braided stream erosion and mastication to thin forests for fire prevention. As such, the majority of the ground surface within the APE has undergone some level of disturbance (NCE 2019). The San Bernardino roadway, proposed to become the Class 1 path, is presently a compacted dirt, two-track road used for utility access. Construction of the Class 1 path would require excavation of approximately 1.5 feet in depth in the existing disturbed roadway area, or within the approximate prism of previous access road related disturbance. Due to existing disturbance and placement of fill for the roadway, it is unlikely this area contains cultural material that could be impacted by the project (NCE 2019).

For the proposed bridge over the Upper Truckee River, bridge abutments would be constructed on each side of the bridge to span the Upper Truckee River channel. Bridge abutments would be constructed at depths up to 8 feet below ground surface (bgs). To facilitate the span of approximately 200 feet from end to end, an additional support (or bent) would be located on the west side of the river channel approximately 40 feet from the west side abutment and would be constructed approximately 3 feet below ground surface. The boardwalk approach at each end of the bridge would require installation of helical piers, each constructed up to a maximum of 8 feet bgs.

As discussed, the Upper Truckee River channel alignment has changed dramatically overtime. Therefore, the potential for subsurface deposits with the Upper Truckee River is limited to floodplain areas adjacent to the stream channel that have, overtime, been modified by normal stream dynamics. Any resources present in these deposits would be of a secondary nature, lacking contextual integrity or association and therefore the potential to impact a resource of significance is low (NCE 2019).

Compliance with federal, state, Caltrans, TRPA, and General Plan policies developed to avoid or mitigate for impacts to cultural resources would ensure the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; therefore, potential impacts would remain less than significant.

Required Mitigation: None.

3.4.7-3. Would the Project disturb any human remains, including those interred outside of formal cemeteries? (CEQA Vc)

Standard of Significance: A significant impact results if the Project affects human remains.

Environmental Analysis: Less Than Significant Impact.

Based on the prehistoric and historic uses of the area and the prior ground disturbance of the project area, human remains are not expected to be discovered during construction activities. However, the potential still exists to pose a significant impact to human remains should they be encountered during construction related ground disturbing activities (Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave).

Section 7050.5(b) of the California Health and Safety Code and Section 5097.98 of the State Public Resources Code specify required protocol to implement when human remains are discovered. If human remains are discovered, the Codes require work to cease within the immediate area and notification of the County Coroner. 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 including notification of the Washoe and UAIC tribes.

Because the project is required to comply with these requirements to implement controls to protect human remains against significant impact during ground-disturbance activities, the project would not alter or adversely affect or result in the loss of these resources and their associated ethnic and cultural values. Therefore, all potential impacts to human remains would remain less than significant.

Required Mitigation: None.

3.4.7-4. Will the Project result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building? (TRPA 20a)

<u>Standard of Significance:</u> A significant impact occurs if the Project adversely affects significant historical or archaeological resources in violation of Section 67 of the TRPA Code of Ordinances.

Environmental Analysis: No Impact.

See discussion in Questions 3.4.7-1 and 3.4.7-2 above. No significant archaeological, historic sites, structures, objects, or buildings were identified for the project area; there would be no impact.

Required Mitigation: None.

3.4.7-5. Is the Project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records? (TRPA 20b)

<u>Standard of Significance:</u> A significant impact occurs if the Project adversely affects significant historical or archaeological resources in violation of Section 67 of the TRPA Code of Ordinances.

Environmental Analysis: No Impact.

See discussion in Questions 3.4.7-1 and 3.4.7-2 above. As discussed in the Environmental Setting, the project area does not contain any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records; there would be no impact.

Required Mitigation: None.

3.4.7-6. Is the Project associated with any historically significant events and/or sites or persons? (TRPA 20c)

<u>Standard of Significance:</u> A significant impact occurs if the Project adversely affects significant historical or archaeological resources in violation of Section 67 of the TRPA Code of Ordinances.

Environmental Analysis: No Impact.

As discussed in fully in the Tribal Cultural Resources Section 3.4.20, tribes were invited to consult on the project. No tribal cultural resources, including historically significant events and/or sites or persons were identified for the project area; there would be no impact.

Required Mitigation: None.

3.4.8 Energy (CEQA/TRPA)

This section presents the analyses for potential impacts to energy. Table 3.4.8-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.8-1: Energy				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.8-1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (CEQA VIa)			Х	
3.4.8-2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (CEQA VIb)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.8-3. Use of substantial amounts of fuel or energy? (TRPA 15a)				Х
3.4.8-4. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy? (TRPA 15b)				X

Environmental Setting

The Project Area consists of residential neighborhoods, NFS land, and land within the Tahoe Paradise Park, crossing the Upper Truckee River. Since this is a partially developed area, there are energy sources in the vicinity that serve urban uses, including overhead power lines. Energy used in the area includes electricity, natural gas, gasoline and diesel fuel, and renewable energies.

Environmental Analysis and Mitigation Measures

3.4.8-1. Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (CEQA VIa)

<u>Standard of Significance:</u> A significant impact occurs if Project construction or operations uses a quantity of fuel greater than average for a use of this type or that proposes to consume large quantities of energy.

Environmental Analysis: Less than Significant Impact.

The Project proposes a trail that would not require the long-term use of energy resources and that has the potential to reduce fuel consumption by providing access and connection to other trail systems for pedestrian and bicycle use. The Project, therefore, would not consume energy resources once construction is complete and has the potential to reduce overall fuel consumption in the area. Non-renewable energy resources such as gasoline and diesel are consumed during the construction process. Because construction would be limited and would not require quantities of energy resources beyond those of typical trail construction, and since the Project has the potential to reduce automotive trips in the area on an operational basis, the Project would not result in substantial depletion or wasteful use of energy resources during construction.

Required Mitigation: None.

3.4.8-2. Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (CEQA VIb)

<u>Standard of Significance:</u> A significant impact would occur if a conflict with renewable energy policies or programs occurs or if policies and programs regarding energy efficiency are violated.

Environmental Analysis: No Impact.

The Project would implement a program in the 2017 RTP/SCS and reduces fuel consumption by replacing automotive trips with pedestrian and bicycle trips. No lighting or other features that consume energy are proposed for the Project, outside of the construction process. Therefore, the Project actively supports plans for energy efficiency and would not obstruct plans to develop or expand renewable energy or energy efficiency programs.

Required Mitigation: None.

3.4.8-3. Would the Project use substantial amounts of fuel or energy? (TRPA 15a)

<u>Standard of Significance:</u> Significant impacts occur if Project features or components use large quantities of fuel above the volume required for such operations.

Environmental Analysis: No Impact.

Refer to Question 3.4.8-1. Project operations would not require fuel consumption outside of regular maintenance activities that already occur in the area. Construction would require fuel consumption; however, no fuels would be consumed at a higher rate than average and standard idling and equipment use restrictions would prevent wasteful use of fuel.

Required Mitigation: None.

3.4.8-4. Will the Project substantially increase the demand upon existing sources of energy, or require the development of new sources of energy? (TRPA 15b)

<u>Standard of Significance:</u> A significant impact occurs if the use proposed results in an increase in demand such that current supply cannot be met or additional energy sources are required.

Environmental Analysis: No Impact.

The Project would not consume large quantities of construction fuel that could not be supplied or that would require new energy development. Operations include no features that would regularly consume fuel.

3.4.9 Geology and Soils (CEQA) and Land (TRPA)

This section presents the analyses for potential impacts to geology, soils and land. Table 3.4.9-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.9-1: Geology and Soils and Land				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
 3.4.9-1. 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? Refer to Division of Mines and Geology Special Publication 42? ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? (CEQA VIIa) 			Х	
3.4.9-2. Result in substantial soil erosion or the loss of topsoil? (CEQA VIIb)			X	
3.4.9-3. 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (CEQA VIIc)			Х	
3.4.9-4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (CEQA VIId)			Х	

	Γ		Γ	,
3.4.9-5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (CEQA VIIe)				X
3.4.9-6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (CEQA VIIf)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.9-7. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)? (TRPA 1a)		X		
3.4.9-8. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions? (TRPA 1b)				X
3.4.9-9. Unstable soil conditions during or after completion of the proposal? (TRPA 1c)				Х
3.4.9-10. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet? (TRPA 1d)				Х
3.4.9-11. The continuation of or increase in wind or water erosion of soils, either on or off the site? (TRPA 1e)				Х
3.4.9-12. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake? (TRPA 1f)				Х
3.4.9-13. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards? (TRPA 1g)				X

Environmental Setting

Lake Tahoe lies within the Sierra Nevada Geomorphic Province, occupying a basin surrounded by peaks of the Sierra Nevada Mountains with Freel Peak the highest at 10,891 feet. The eastern and western sides of the basin are composed of granite rock, with minor amounts of older metamorphic rock. Volcanic rock, some deposited as recently as 2.5 million years ago, covers most of the northern and some of the southern part of the basin. The Sierra Nevada is a gently sloping fault block mountain range that was uplifted along its eastern edge. This range is bounded on the east and west by a series of interconnected fault segments. The displacement has been greater on the eastern margin, giving the Sierra Nevada a western tilt. South of Lake Tahoe, there is a single crest dividing the gentle western slope from the steep eastern scarp. The crest splits south of the lake, with one crest trending northwesterly and the other crest trending northward creating the Carson Range. This range separates the Carson Valley from Lake Tahoe. Lake Tahoe occupies the basin between the two uplifted crests.

<u>Geology.</u> The Lake Tahoe Basin was formed two to three million years ago by geologic block faulting between the northwest-trending Sierra Nevada to the west and the north-trending Carson Ridge to the east. Lake Tahoe occupies the depression, or fault-produced graben, between these two uplifted mountain ranges. During the past two million years, glaciers played an active role in shaping the Sierra Nevada Mountains and Lake Tahoe. Alpine glaciers extended below the current lake level along the west shoreline and Emerald Bay. The basement geology of the Lake Tahoe Basin is divided into three categories: granitic, metamorphic and volcanic (Hyne et al. 1972).

<u>Soils.</u> Most of the soils in the Lake Tahoe Basin are of granitic or volcanic parent material. The soils are geologically young and poorly developed. Most soils are shallow, coarse textured, and have low cohesion, and contain small amounts of organic material. These attributes account for a high erosion potential on steeper slopes in the Tahoe Basin. Soils within the Project area include:

- Pits and dumps (7031). (0.3% of the area).
- Tahoe complex, 0 to 5 percent slopes (7042). This complex is typically along riparian corridors, floodplains and valley flats. The parental material consists of alluvium derived from granitic and volcanic rocks. The soil is poorly drained. Shrink-swell potential is low, and the soil is frequently flooded. Surface runoff is very high. The hydrologic soil group is A/D. (18.5% of the area).
- Celio series, 0 to 5 percent slopes (7431). This complex is typically found in the southern part of the Basin. The parental material consists of alluvium and/or outwash. The soil is somewhat poorly drained. Shrink-swell potential is low, and the soil is rarely flooded. Surface runoff is high. The hydrologic soil group is A/D. (63.0% of the area).
- Meeks gravelly loamy coarse sand, 5 to 15 percent slopes, stony (7482). This complex is typically found in the southwestern part of the Basin. The parental material consists of outwash and/or till derived from granodiorite. The soil is somewhat excessively drained. Shrink-swell potential is low, and the soil has no potential for flooding. Surface runoff is very low. The hydrologic soil group is A. (18.2% of the area).

<u>Seismicity.</u> The potential for seismic activity within an area is primarily related to the proximity of faults. Faults are fractures or zones of related fractures where the rocks on one side have been displaced with respect to rocks on the other side. An "active fault" is defined as one that has had surface displacement within the past 11,000 years, the Holocene. Potentially active faults are defined as those that have ruptured between 11,000 and 1.6 million years before the present (Quaternary). Faults are generally considered inactive if there is no evidence of displacement during the Quaternary period.

The Lake Tahoe Basin is located in a region of Holocene age and early Quaternary age, as evidenced by the features and historical data published in Natural Hazards of the Lake Tahoe Basin (Cooper, Clark and Associates 1974) and Preliminary Maps of Pleistocene to Holocene Faults in the Lake Tahoe Basin, California and Nevada (Saucedo 2005). Movements have taken place along faults adjacent to the basin within historical time (Lawson 1912; Kachadoorian 1967). Sediments at the bottom of Lake Tahoe show offsets or displacements that are indicative of faulting, and steep cliffs (30 to 45 degree slopes) and other topographic features associated with active faulting are found on both sides of Lake Tahoe (Hyne et al. 1972).

A north-south fault zone, located about six miles east of the Lake Tahoe Basin, separates the eastern edge of the Sierra Nevada from the parallel fault-block mountains of Nevada and Utah. The north-south faults along the shores of Lake Tahoe appear to be the longest continuous faults traversing the basin area. Of these faults, the fault along the west side of the lake appears to be the longest, with a surface length of approximately 50 miles. A fault of this length could potentially generate a 7.5 magnitude earthquake (Cooper, Clark and Associates 1974).

The Preliminary Resource Element for Sugar Pine Point State Park (CDPR 1991) characterizes the seismicity of the Lake Tahoe Basin. The fault activity has played a major, geologically recent role in the evolution of the Tahoe Basin, and the potential for a large destructive earthquake sometime in the future should be considered to be high. Relative to much of the rest of California, however, the earthquake shaking potential (Branum et al. 2008) and earthquake hazard (USGS and CGS 2010) in the Project area are low. Rather than a single linear fault, the Sierra Nevada frontal fault system is a complex zone of faults along the eastern face of the Sierra Nevada. The western Lake Tahoe boundary fault, and the mountains that rise above the western edge of Emerald Bay, very likely represent a segment of the Sierra Nevada fault system.

Based upon physiographic evidence, the main fault on the west side of the Lake Tahoe Basin probably lies less than a mile east of the shore at Ed Z'berg-Sugar Pine Point State Park, about 0.5 mile east of the shore at Rubicon Point, and continues south immediately offshore of Eagle Point at the mouth of Emerald Bay, heading inland at Baldwin Beach.

Since the 1900s, a number of earthquakes with an intensity of less than 5.0 Richter magnitude have been recorded in the Basin, although historical epicenters are more common to the north of Lake Tahoe and to the south-southeast of the Lake Tahoe Basin along the Sierra Nevada frontal fault system. Both of these areas have experienced moderate to high magnitude earthquake activity measuring between 5.0 and 7.5 on the Richter scale.

<u>Liquefaction and Landslide Hazards.</u> Secondary seismic hazards, such as liquefaction and landslides, may occur during an earthquake. Liquefaction could occur in loose, granular materials (alluvium) below the water table, such as along stream channels and in unconsolidated, disturbed materials. It takes place when a granular material is transformed from a solid state to a liquid state during earthquake events. The potential for liquefaction as a result of seismic events is high in areas of unconsolidated and saturated fine-grained alluvium such as at the mouth of creeks.

Landslides and debris flows triggered by earthquake ground shaking have historically been the cause for a great deal of property damage and loss of life. Areas most susceptible to earthquake-induced landslides are generally on steep slopes or adjacent to existing landslide deposits. The possibility of landslides and seismically induced slope instability is considered low due to topography in the vicinity of the trail alignment.

Land Capability and Coverage. The TRPA established a land capability system based upon the Bailey Land Classification System methodology (Bailey 1974). Land capability classification delineates the amount of impermeable development coverage (e.g. base allowable land coverage) that may exist within a land capability district (LCD). LCDs 1 to 3 are more sensitive to development, with LCD 1 being the most environmentally fragile. LCD 1b (also referred to as Stream Environment Zones or SEZ) is assigned whenever land is influenced by a stream or high groundwater.

A land capability verification has not been prepared for the Project area. TRPA Bailey mapping for the project vicinity shows LCDs 1b and 1c land capability with the trail corridor entirely within Class 1b (SEZ) boundaries. Existing coverage within the Project area includes dirt roads and trails, Tahoe Paradise park facilities, and paved roadways and parking.

<u>Regulations.</u> There are regulatory laws governing geologic protection and safety from geological hazards. For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under CEQA.

Federal regulations include the Earthquake Hazard Reduction Act of 1977, Executive Order 12699 on Seismic Safety of Federal Buildings, and the Uniform Building Code (superseded in California by the 2016 California Building Code). State regulations include the Alquist-Priolo Earthquake Zone Act, the Field Act, the 2016 California Building Code, the Seismic Hazards Mapping Act, and the Historic Structures Act (California PRC 5028).

In the Lake Tahoe Basin, TRPA Goals and Policies, Soils (1986), Goal #1 is stated as "Minimize soil erosion and the loss of soil productivity." This goal is to maintain soil productivity and existing vegetation cover and prevent excessive sediment and nutrient transport to streams and lakes.

PRC § 5097.5 prohibits excavation or removal of any "vertebrate paleontological site [...] or any other ... paleontological ... feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. PRC § 5097.5 states that any unauthorized disturbance or removal of paleontological materials or sites located on public lands is a misdemeanor.

Environmental Analysis and Mitigation Measures

3.4.9-1. Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

3.4.9-1.i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? (CEQA VIIa).

<u>Standard of Significance:</u> For Question 5.4.9-1i through iv, the location of facilities within an Alquist-Priolo earthquake fault zone or known active fault zone or the location of facilities within areas of unstable soil without appropriate design features or construction controls constitutes a significant impact. Environmental Analysis: Less than Significant Impact.

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was implemented to regulate development near active faults and to prevent construction of buildings for human occupancy on or near active faults (i.e., that have ruptured within the past 11,000 years). The designated zone extends from 200 to 500 feet on both sides of known active fault traces. Under the Act, no buildings intended for human occupancy may be constructed on or within fifty feet of an active fault trace. The Project is not located within an Alquist-Priolo Earthquake Fault Zone as designated by the California Geological Survey (CGS 2007) and proposes no structures that are designed for human occupancy. Therefore, there is no expected adverse effect on people or structures with regard to earthquake rupture as a result of implementation of this Project. The risk of fault rupture is a less than significant impact based on existing published data of officially recognized faults and proximity of the project area to such faults.

Required Mitigation: None.

3.4.9-1.ii) Strong seismic ground shaking?

Environmental Analysis: Less than Significant Impact.

See discussion and analysis for Question 3.4.9-1.i above.

Required Mitigation: None.

3.4.9-1.iii) Seismic-related ground failure, including liquefaction?

Environmental Analysis: Less than Significant Impact.

The California Department of Conservation and California Geological Survey maps do not identify the Project area as prone to liquefaction or landslides. The boardwalk and bridge structures would be engineered to Caltrans and CBC requirements.

Required Mitigation: None.

3.4.9-1.iv) Landslides?

Environmental Analysis: Less than Significant Impact.

The area is relatively flat, located on existing paved roadways, or dirt utility roads. The Class 1 trail would include sections of raised boardwalk and a bridge crossing of the Upper Truckee River. There are no nearby cliffs or areas of steep slopes in which a landslide could occur. The possibility of landslides and seismically induced slope instability is considered low due to topography in the vicinity of the trail alignment.

Required Mitigation: None.

3.4.9-2. Would the Project result in substantial soil erosion or the loss of topsoil? (CEQA VIIb)

<u>Standard of Significance:</u> Significant impacts result from non-compliance with TRPA Code Chapters 30, 33 and 60, the 208 Plan, the Lahontan Basin Plan (Chapter 5) or construction permit conditions requirements for the control of erosion on and off-site and the stabilization of soils during and upon completion of excavation, grading and fill activities.

Environmental Analysis: Less than Significant Impact.

See discussions and analyses for Questions 3.4.9-8, 3.4.9-9 and 3.4.9-10 below.

Required Mitigation: None.

3.4.9-3. Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (CEQA VIIc)

<u>Standard of Significance:</u> The location of new structures of facilities within areas subject to unstable soil conditions resulting from grading, excavation or fill constitutes a significant impact.

Environmental Analysis: Less than Significant Impact.

See discussions and analyses for Questions 3.4.9-1.i through 3.4.9-1.iv above and Question 3.4.9-4 below.

Required Mitigation: None.

3.4.9-4. Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (CEQA VIId)

<u>Standard of Significance:</u> Significant impacts result if the Project locates facilities within areas of moderate to high soil risk potential identified by geotechnical assessments, of unstable soils, or of expansive or corrosive soils without appropriate geotechnical and engineering measures.

Environmental Analysis: Less than Significant Impact.

Soils in the Class 1 bike trail Project area consist primarily of (7431) Celio Loamy Coarse Sand 0-5% slopes and (7042) Tahoe Complex 0-5% Slopes. These soils have low expansive soil/plasticity ratings. The trail and bridge structure would be engineered per the California Building Code standards to avoid risks to persons using the trail and bridge or damage to the trail or bridge during a seismic event.

Required Mitigation: None.

3.4.9-5. Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (CEQA VIIe)

<u>Standard of Significance</u>: Development of septic systems or alternative wastewater disposal systems in areas of soils that are inadequate of support such a use results in a significant impact.

Environmental Analysis: No Impact.

The Porter-Cologne Water Quality Act requires all sewage and wastewater to be disposed of outside the Lake Tahoe Basin. Therefore, use of septic tanks or alternative wastewater disposal are prohibited in the Lake Tahoe Region.

3.4.9-6. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (CEQA VIIf)

<u>Standard of Significance</u>: A significant effect on the environment occurs if the project has the potential to pose a significant impact to paleontological resources identified during construction related ground disturbing activities, if any paleontological resources are identified during construction, as provided in PRC Section 5097.98, or if the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The significance of paleontological resources is determined in part by compliance with the Antiquities Act of 1906. Fossil remains of vertebrates are considered significant resources.

Environmental Analysis: No Impact.

The Project area contains no known unique paleontological resources or fossiliferous geologic features, and therefore, no paleontological resources or unique geologic features will be directly or indirectly destroyed by the Project. However, in the event of inadvertent discovery during construction, Caltrans is required to implement procedures to comply with state and federal law pertaining to the protection of resources.

Required Mitigation: None.

3.4.9-7. Would the Project result in compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)? (TRPA 1a)

<u>Standard of Significance:</u> Project proposals that do not comply with provisions of TRPA Code Section 30.4 for maximum coverage (note: maximum land coverage for linear public facilities equals the minimum amount necessary to achieve the public purpose), Section 30.5 for additional coverage in low capability lands, or Section 30.6 for existing excess coverage create a significant impact.

Environmental Analysis: No with Mitigation Measures.

Tahoe Regional Planning Agency

TRPA Code Chapter 30 contains the criteria pertinent to land coverage for the project area. The Project proposal includes new land coverage and disturbance of SEZs (LCD 1b) for the Class 1 trail and bridge construction, which is partially located within the 100-year floodplain but by following FEMA requirements and the Caltrans design standards for bridge structures within floodplains, does not adversely affect floodplain function. Analysis of the biological and hydrological impacts from SEZ disturbance are not repeated in this section.

In 2013, TRPA adopted a revised Regional Plan and Code of Ordinances (TRPA, 2013) altering the review and required offsetting restoration for certain shared use trail projects in SEZ. TRPA Code section 30.4.6.D.3 allows exemption from general SEZ disturbance prohibitions for shared use trail projects which meet certain criteria. The following discussion identifies that the entire San Bernardino Class 1 trail section meet these criteria:

a. Accessibility. The San Bernardino Class 1 trail is a public trail available at no cost.

b. Trail Route Design. The Class 1 trail alignment is the most direct rail alignment that minimizes disturbance to sensitive lands, riparian vegetation, and large trees by reducing overall length in wetlands and SEZ and avoiding large trees where possible, and would be constructed in primarily existing disturbed roadway.

c. Trail Design. The Class 1 trail alignment targets use of boardwalks and bridges to protect the wettest soils and most sensitive habitat and to avoid creating obstacles in floodplains and accommodating seasonal surface flows and high groundwater, In drier parts of the SEZ, outer parts of the floodplain, the proposal provides for typical asphalt trail design. Design details for elevated boardwalk sections allow for wildlife passage either under or over the trail. The project also incorporates drainage design features to offset potential impacts of new paved coverage associated with the Class I trail segment. These drainage facilities consist of infiltration channels/swales, rock slope protection and rock dissipators and would be installed, where required, to slow runoff, capture runoff, and allow for infiltration of surface runoff to groundwater. The Project would also implement a groundwater Dewatering Plan as a SWPPP component during construction and would not remove riparian vegetation as discussed in Section 3.4.6, which would only be pruned. Tree removal would also be minimized and tree removal protection measures would be implemented.

d. Limit on Exemption. The Class 1 trail alignment is identified in each of the Lake Tahoe Regions transportation and recreational planning documents (e.g., 2019 Federal Transportation Improvement Program and 2016 LinkingTahoe: Active Transportation Plan) and therefore qualifies for the exemption.

Based on this review, the San Bernardino Class 1 bike trail project is exempt from land coverage transfer under the TRPA Code requirements. However, as described below, the project must still restore disturbed SEZ to offset the new trail features.

Lahontan

Lahontan adopted Basin Plan amendments in 2014 (Lahontan, 2014) which include prohibitions for discharge in SEZ and 100-year floodplains (Prohibitions 5.2 and 5.3) as well as possible exceptions to those prohibitions for outdoor recreation projects. The Regional Board may grant exemptions from Prohibitions 5.2 and 5.3 under the following circumstances:

(a) By their nature projects must be located in SEZ. By their very nature, roads, trails, and utilities traverse large areas of the landscape, following an alignment chosen to connect different locations (Siller Ranch Resolution No. R6T-2006-0021, page 6). The bowl-like nature of the Tahoe Region in South Lake Tahoe creates drainages with their attendant soil types that travel from the surrounding mountains to Lake Tahoe; creating a non-motorized transportation network within this context cannot avoid surface waters and associated SEZ. Therefore, such features by their very nature interact with SEZs in areas where crossings are necessary.

(b) No feasible alternative exists. To connect neighborhoods served by West and East San Bernardino Avenues for bike and pedestrian users, a trail and bridge must be constructed between the existing terminus of the two roadways. To connect these neighborhoods, there is no alternative other than the proposed trail and bridge that will cross the Upper Truckee River and associated SEZ.

Alternatives for the project were analyzed in a Feasibility Study prepared by the County. The FS identified the potential alignment alternatives, all which would require creation of a trail crossing of the Upper Truckee River. The FS also compiled BMP alternatives for mitigating specific problem areas and presented the evaluation of the alternatives. Following these steps, a preferred alternative was selected and documented in a Preferred Project Alternative Memoranda based on input from the public meetings, correspondence received, and the results of the analyses contained in the 2018 Feasibility Report. Both the Feasibility Report and Alternative Memoranda are attached (Appendices H and I).

Alternative 1 (Project) was chosen based on being able to construct the majority of the trail within already disturbed roadway and the ability to implement design features which minimize disturbance and encroachment within the Upper Truckee River floodplain/SEZ. The Project does not require direct impacts within the Upper Truckee River by including a bridge structure that would span the river and utilize a raised boardwalk approach to minimize disturbance to hydrologic function.

(c) Impacts are fully mitigated. The proposal includes two design details intended to reduce impacts to riparian areas. The project would construct a 200 foot long bridge that spans the 100 year floodplain to maintain existing habitat and hydrology below the bridge structure, and boardwalks with helical pier footings at the bridge approaches to eliminate the need to excavate footings and allow free surface and groundwater flow. These actions avoid dewatering the downslope soils with the attendant potential for effect to riparian vegetation. Offsetting restoration is identified below.

The project also incorporates drainage design features to offset potential impacts of new paved coverage associated with the Class I trail segment. These drainage facilities consist of infiltration channels/swales, rock slope protection and rock dissipators and would be installed, where required, to slow runoff, capture runoff, and allow for infiltration of surface runoff to groundwater.

The project would also implement a groundwater Dewatering Plan as a SWPPP component during construction which would include the capture, storage, and appropriate discharge for groundwater. Components of the Dewatering Plan would require that excavation sites be protected with sandbags, water berms, siltation fences, or other Lahontan approved techniques. Localized pumping shall clear the construction area of turbid standing water. Pumped water could be used to irrigate planted vegetation, sprayed on uplands to allow infiltration within the project area, held in Baker Tanks, or otherwise treated to remove suspended sediment to comply with the requirements of Board Order No. R6T-2017-0010.

The project area contains limited riparian environment, limited to the west bank of the river in a small cluster of willow and alder shrubs. The project does not propose to remove these shrubs. The shrubs may be pruned to allow for construction of the bridge span. Additionally, a portion of the raised boardwalk structure and entire bridge span would allow for vegetative growth to continue underneath.

(d) SEZs are restored in an amount of 1.5:1 of the project disturbance. Project modifications (asphalt trail, bridge, and boardwalk trail) will disturb at maximum 13,080 sf (0.30 acres) of SEZ, requiring 19,620 sf (0.45 acres) of offsetting restoration. Restoration of disturbed SEZ will first be completed by the removal and restoration of existing land coverage/disturbance in the Upper Truckee River vicinity (e.g., footpaths adjacent to the river, former staging areas near the terminus of West San Bernardino Avenue). Any additional restoration credits required for the Project will originate from locations under the jurisdiction of El Dorado County, or if unavailable, from the California Land Bank. As of 2016, the land bank identified restoration credit available of approximately 144,000 sf.

The Project proposal, including the provisions for BMPs and on-site SEZ restoration where possible, meets the findings necessary to avoid significant impact from additional encroachment in low capability lands.

Required Mitigation: GEO-1. SEZ Restoration Credit for New Trail Disturbance

Under the provisions of the Regional Plan Update, TRPA exempts certain trails from land coverage calculations. However, compliance with the Lahontan Basin Plan requires new disturbance in SEZ meeting certain criteria to be offset with SEZ restoration at a 1:1.5 ratio. To mitigate the impact to SEZ, the County will first look for existing SEZ land coverage or disturbance in the immediate project vicinity that can be restored and permanently protected. If

there is insufficient SEZ restoration potential in the project vicinity, the County will utilize SEZ restoration credits from projects previously restored and banked. These projects, or others eligible at the time of final project approvals, include:

• 2010 Angora Creek Stream Environment Zone Restoration Project near View Circle in El Dorado County restored/enhanced 6.85 acres (298,392 square feet) of SEZ and/or wetlands within and adjacent to Angora Creek – up to 257,396 sf (5.91 acres) of restoration is still banked and available from implementation of this project.

These restoration projects, or others as approved, include successful soil and habitat restoration that are expected to offset floodplain and wetland disturbance as well as the TRPA and Lahontan required SEZ disturbance. If needed for this Project, a wetland delineation for the restoration projects will be reviewed to determine the amount and type of wetland restoration/credit that is available, should it be needed for the San Bernardino Bike Trail project permitting.

3.4.9-8. Will the Project result in a change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions? (TRPA 1b)

<u>Standard of Significance:</u> Changes in topographic features of the project area that are inconsistent with the surrounding conditions results in a significant impact to topography or ground surface relief features.

Environmental Analysis: No Impact.

Field evaluations identify no unique geologic or physical features within the project area that could be destroyed, covered or modified.

The Project proposal complies with the TPRA Code Site Development Provisions and Grading and Construction Provisions, creates no impact to native geologic substructures, and minimizes changes in topography. The proposal locates the Class 1 bike trail in areas of moderate slope – no portion of trail grades exceed 5 percent. Excavation for the bridge abutments do not exceed 8 feet bgs, and cut and fill slopes along the shared-use bike trail alignment do not exceed 5 feet in depth below existing grades.

Required Mitigation: None.

3.4.9-9. Will the Project result in unstable soil conditions during or after completion of the proposal? (TRPA 1c)

<u>Standard of Significance</u>: Significant impacts result from non-compliance with TRPA Code Chapters 30, 33 and 60, the 208 Plan and the Lahontan Basin Plan (Chapter 5), which require the control of erosion on and off-site and the stabilization of soils during and upon completion of excavation, grading and fill activities.

Environmental Analysis: No Impact.

The project description in Chapter 2 includes provisions to prevent short-term erosion from construction impacts and long-term erosion from operational and maintenance activities.

Short-Term. The potential for erosion is greatest during the construction period and prior to establishment of revegetation plantings. Construction of the Project involves soil disturbance and vegetation removal from clearing and grubbing activities, grading for cut and fill slopes necessary to achieve final bike trail grades and the actual construction of the trail, boardwalk and bridge. Construction

activities could cause temporary, short-term increases in runoff, soil erosion, wind erosion and sedimentation within and down gradient of the project area. When disturbed sites are not adequately stabilized and revegetated, wind can dislodge soil particles and make them airborne. When runoff bypasses natural processes, this water is not infiltrated and filtered by soils to provide contribution to local groundwater supplies. Excess runoff can overwhelm stream channels with increased water volumes and pollutant concentrations and result in stream bank erosion, loss of vegetation, and reductions in functional aquatic habitat and SEZ.

The facility features and construction controls incorporated into the Project proposal to reduce short-term erosion potential include construction phasing to limit the duration of construction and extent of disturbance present at one time and temporary BMPs. Temporary BMPs provide dust control, protect and stabilize stored materials, define work zones, staging and access areas to limit disturbance, slow runoff velocity and intercept sediment during storm events, and stabilize slopes during Project construction and initial vegetation establishment periods.

Because of a lack of steep slopes and the presence of fertile soils with good ground cover, the project area would not have site challenges to construction that could limit the effectiveness of standard construction controls and facility features.

Long-term. The Project proposal includes hydrologic source controls to infiltrate runoff from the trail surface into the adjacent clear zones and avoid off-site impacts to soils. The Project stabilizes and revegetates areas disturbed during construction and maintains these areas as detailed in the project description. Long-term maintenance of these areas minimizes long-term effects to soils. The Project proposal minimizes soil disturbance and loss of topsoil through:

- Revegetation specifications that respond to site-specific conditions;
- Stabilization of cut and fill slopes;
- Adequate cross drainage;
- Installation of culverts in areas with evidence of surface drainage;
- Bridge span to avoid Upper Truckee River channel and associated floodplain; and
- Installation of asphalt concrete trail on permeable fill/vented trail if needed in areas with evidence of seasonal surface hydrology.

This evaluation concludes that the Project proposal includes facility features and construction controls that are appropriate and adequate to minimize erosion on and off-site and stabilize soils during and upon completion of excavation, grading and fill activities. The Project conforms to federal, regional, State and local codified regulations for the control of soil erosion, thereby reducing potential impacts to a level of less than significant.

Required Mitigation: None.

3.4.9-10. Will the Project result in changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet? (TRPA 1d)

Standard of Significance: TRPA Code Subsection 33.3.6 prohibits excavation in excess of 5 feet in depth or where there exists a reasonable possibility of interference or interception of a water table except under

defined and permitted conditions. If groundwater interception or interference will occur as demonstrated by a soils hydrologic report, excavations can be made and significant impacts avoided through inclusion of facility measures to protect groundwater flows to avoid adverse impacts to SEZ vegetation, if any would be affected, and to prevent groundwater or subsurface water from leaving the project area as surface flow.

Environmental Analysis: No Impact.

Preliminary field evaluations identified no severe soil constraints that preclude grading and construction activities with the exception of areas of potential shallow groundwater along the Upper Truckee River near the bridge abutments. The Project proposal addresses these geotechnical constraints by placing a bridge span over the Upper Truckee River channel and floodplain.

The Project avoids cut slopes in SEZ. Construction of the Project requires very little excavation or importation of fill materials, as the proposal utilizes relatively flat areas in the project area, with transportation of excess cut materials off-site to a TRPA approved disposal site to be identified during Project permitting. Because grading occurs throughout the construction period of a linear project and not all at once, no more than two to three truckloads (20 cubic yard capacity) of material would be hauled off-site daily, if the Class 1 trail is completed within one construction period spanning May 1 through October 15.

TRPA prohibits excavations deeper than five feet because of the potential for groundwater interception or interference, except under defined and permitted conditions. The Project requires cuts of up to eight (8) feet in depth for the two bridge abutments. A soils hydrology report will be required to include measures to protect groundwater quality. Compliance with TRPA Code Subsection 33.3.6 reduces the potential impacts from excavations to a level of less than significant through conformance with codified regulations and groundwater protections.

Required Mitigation: None.

3.4.9-11. Will the Project result in the continuation of or increase in wind or water erosion of soils, either on or off the site? (TRPA 1e)

<u>Standard of Significance</u>: A significant impact occurs if the Project causes a continuation of or increase in wind erosion or water erosion of soils, either on or off-site, creating non-compliance with TRPA Code Chapters 30, 33 and 60, the 208 Plan and the Lahontan Basin Plan (Chapter 5), which require the control of erosion on and off-site and the stabilization of soils during and upon completion of excavation, grading and fill activities.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.9-9 above.

Required Mitigation: None.

3.4.9-12. Will the Project result in changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake? (TRPA 1f)

<u>Standard of Significance</u>: Effects that modify the channel of a river or stream or the bed of a lake create a significant impact.

Environmental Analysis: No Impact.

The project area does not include shorezone area. The Project avoids encroachments to the Upper Truckee River channel below its 100-year floodplain at the bridge span, and therefore, creates no significant impacts to river channels.

Required Mitigation: None.

3.4.9-13. Will the Project result in exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mudslides, ground failure, or similar hazards? (TRPA 1g)

<u>Standard of Significance:</u> The location of facilities within an Alquist-Priolo earthquake fault zone or known active fault zone or the location of facilities within areas of unstable soil without appropriate design features or construction controls constitutes a significant impact.

Environmental Analysis: No Impact.

See analysis for Question 3.4.9-1, which addresses CEQA checklist item VIIa and concludes potential impacts from hazardous conditions to be less than significant.

3.4.10 Greenhouse Gas Emissions (CEQA) and Air Quality (TRPA)

This section presents the analyses for potential impacts to greenhouse gas (GHG) emissions. Table 3.4.10-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.10-1: Greenhouse Gas Emissions and Air Quality				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.10-1. Greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (CEQA VIIIa)			Х	
3.4.10-2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (CEQA VIIIb)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.10-3. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? (TRPA 2d)				Х
3.4.10-4. Increased use of diesel fuel? (TRPA 2e)				X

Environmental Setting

Greenhouse gases (GHG) such as carbon dioxide and methane trap heat in the earth's atmosphere. Increased concentrations of these gases over time produce an increase in the average surface temperature of the earth. The rising temperatures can in turn produce changes in precipitation patterns, storm severity, and sea level, resulting in what is commonly referred to as "climate change."

Global climate change is caused in large part by anthropogenic (human caused) emissions of GHGs released into the atmosphere through the combustion of fossil fuels and by other activities that affect the global GHG budget, such as deforestation and land use change. According to the California Energy Commission (CEC), GHG emissions in California are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors as well as natural processes (California Energy Commission, 2006a).

Carbon Dioxide (CO_2) is the primary GHG attributed to the Project. CO_2 accounts for more than 75% of anthropogenic GHG emissions. Increasing concentrations of CO_2 in the atmosphere are largely due to

emissions from the burning of fossil fuels, gas flaring, cement production, and land use changes such as vegetation removal and large-scale agriculture.

In order to simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method to compare GHG emissions is the "global warming potential" methodology defined in the Intergovernmental Panel on Climate Change (IPCC) reference documents (IPCC 1996; IPCC 2001). The IPCC defines the global warming potential (GWP) of various GHG emissions in terms of CO_2 equivalents (CO_2e), which compares the GHG in question to that of the same mass of CO_2 (by definition, CO_2 has a global warming potential (GWP) of 1.0).

CARB completed a GHG inventory of California's 2006 GHG emissions in 2009 and the state's 2017 GHG emissions in 2019. Their 2009 report states that 1990 emissions amounted to 433.3 million metric tons (MMT) of carbon dioxide equivalent (CO₂e), while 2006 emissions levels rose to 483.9 MMT of CO₂e (CARB 2009). Based on California's 2006 population of 37,114,598, this amounted to approximately 13 metric tons of CO₂e per person (State of California, Department of Finance 2008). The 2017 inventory showed GHG emissions decreasing, where 2017 GHG emissions accounting for 424 MMT of CO₂e, which was 5 MMT of CO₂e less than 2016 levels, despite economic and population growth. Since 2016 GHG emissions have been below the 2020 limit of 431 MMT of CO₂e (CARB 2019)

The California State law and policies have been implemented to reduce the amount of GHG generated each year. As stated in Assembly Bill 32, Global Warming Solutions Act (AB 32), passed in 2006; "The State of California found that Global Warming would have detrimental effects on some of California's largest industries including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry." AB 32 requires statewide GHG emissions in California be reduced to 1990 levels by the year 2020 and requires the CARB to adopt rules and regulations to achieve this goal.

In California, CDPR has developed a "Cool Parks" initiative to address climate change within the State Park system. Cool Parks proposes that CDPR itself, as well as resources under its care, adapt to the environmental changes resulting from climate change. In order to fulfill the Cool Parks initiative, CDPR is dedicated to using alternative energy sources, low emission vehicles, recycling and reusing supplies and materials, and educating staff and visitors on climate change (CDPR 2008).

Some GHG such as carbon dioxide occur naturally and are emitted to the atmosphere through natural processes and through human activities. Naturally occurring greenhouse gasses include water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

In 2013, the California Tahoe Conservancy Regional Greenhouse Gas Emissions Inventory for the Lake Tahoe Region found the region-wide annual GHG emissions levels to be 1,398,554 metric tons of CO₂e, caused primarily by wildfire and prescribed burns and transportation sources. By comparison, the primary source of GHG emissions in both California and Nevada were electricity consumption, followed by transportation. (TRPA Sustainable Communities Program, 2013)

<u>Standards.</u> The EDCAQMD has adopted a Guide to Air Quality Assessment and has adopted the state and federal threshold but has not established thresholds for GHG emissions. For GHGs, the Council on Environmental Quality has established a project emissions threshold level of 25,000 MT CO₂eGHG emissions. For the Lake Tahoe Region, the standards used include a De Minimis level for operations of 1,100 metric tons of CO₂e per year, 10,000 metric tons of CO₂e per year for the construction and operational phase of projects, and daily thresholds measured in pounds per day (82 lbs/day) for reactive organic gases, oxides of nitrogen, and particulate matter. Each of the thresholds would be the equivalent of a 617 unit single family dwelling project or a 249,1000 square foot commercial building. In 2017, California Air Resources Board released *California's 2017 Climate Change Scoping Plan: The Strategy*

for Achieving California's 2030 Greenhouse Gas Target, which guides future actions to reach the 2030 target of a 40 percent reduction in GHG emissions below 1990 statewide GHG emissions that was established by Executive Order B-30-15 and Senate Bill 32. To assess consistency with California's 2030 GHG target of 40 percent below 1990 levels, the SMAQMD threshold of 1,100 MTCO2e/year, established for the purpose of reducing 2020 statewide emission to 1990 levels (2020 target), has been adjusted down by 40 percent to 660 MTCO2e/year (2030 target).

GHG planning guidance for the Lake Tahoe Basin is outlined in the TMPO Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) which anticipates reducing GHG emissions per person by 12% in 2020 and 7% in 2035, to be accomplished by focusing on regional land use and transportation policies. Strategies in the 2017 RTP/SCS include transit programs (free-to-the-user transit, transit priority access, transit schedule coordination, etc.), parking management, and others, one of which is proposed by this project (shared-use trail).

Environmental Analysis and Mitigation Measures

3.4.10-1. Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (CEQA VIIIa)

<u>Standard of Significance:</u> An increase in greenhouse gas emissions would be considered significant if the project would obstruct implementation of any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions.

Environmental Analysis: Less than Significant Impact.

The Project would have a beneficial impact on greenhouse gas emissions by improving opportunities for non-motorized transportation (pedestrian and bicycle use), which may reduce vehicle dependence and associated mobile emissions.

Project construction will result in short term GHG emissions from construction equipment emissions and emissions from workers' vehicles traveling to and from the construction sites. Construction phase emissions cease at the completion of construction. Due to the small size of the project, construction emissions would not exceed thresholds. Since the Project promotes a shift in transportation mode from autos to non-motorized users, it results in a net reduction of regional VMT. Therefore, the operational phase of the project creates a small beneficial effect on long-term vehicle-related GHG emissions and climate change.

Required Mitigation: None.

3.4.10-2. Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (CEQA VIIIb)

<u>Standard of Significance:</u> A significant impact occurs if the project conflicts with the 2017 TMPO RTP/SCS or with EDCAQMD regulations.

Environmental Analysis: No Impact.

The Project is proposed within the 2017 TMPO RTP/SCS to reduce dependence on automotive travel, reduce VMT, and improve air emissions levels. Therefore, the Project supports and implements adopted plans that reduce greenhouse gas emissions.

Required Mitigation: None.

3.4.10-3. Would the Project result in alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? (TRPA 2d)

<u>Standard of Significance</u>: A significant occurs if project facilities or emissions alter the movement of air or change the ambient moisture or temperature levels.

Environmental Analysis: No Impact.

The Project has the potential to result in a beneficial impact by replacing automotive trips with pedestrian and bicycle trips where a decline in emissions may occur. Although some emissions would occur during construction, they would not alter air movement, temperature or moisture levels such that climate change would occur. Construction activities would take place over a temporary, 4-month period. Operations have the potential to result in long-term decreases in emissions that affect climate.

Required Mitigation: None.

3.4.10-4. Would the Project result in increased use of diesel fuel? (TRPA 2e)

Standard of Significance: A significant impact would occur if the Project results in long-term increases in diesel fuel consumption.

Environmental Analysis: No Impact.

The Project is proposed within the 2017 TMPO RTP/SCS to reduce dependence on automotive travel, reduce VMT, and improve air emissions levels. The project would help to reduce long-term diesel fuel use by improving connectivity for pedestrian and bicycle transportation. Although some diesel fuel would be consumed during construction, this temporary use of fuel would be offset by the beneficial decrease in automotive dependency.

3.4.11 Hazards and Hazardous Materials (CEQA) and Risk of Upset and Human Health (TRPA)

This section presents the analyses for potential impacts to hazards and hazardous materials and risk of upset and human health. Table 3.4.11-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.11-1: Hazards and Hazardous Materials and Risk of Upset and Human Health				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.11-1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (CEQA IXa)			Х	
3.4.11-2. 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? (CEQA IXb)			Х	
3.4.11-3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (CEQA IXc)			Х	
3.4.11-4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (CEQA IXd)				X
3.4.11-5. 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? (CEQA IXe)				X

3.4.11-6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (CEQA VIIIf)				X
3.4.11-7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (CEQA IXg)			Х	
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.11-8. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions? (TRPA 10a)				Х
3.4.11-9. Involve possible interference with an emergency evacuation plan? (TRPA 10b)				Х
3.4.11-10. Creation of any health hazard or potential health hazard (excluding mental health)? (TRPA 17a)				Х
3.4.11-11. Exposure of people to potential health hazards? (TRPA 17b)				X

Environmental Setting

The Project area includes the neighborhood streets of West and East San Bernardino Avenues, and an existing dirt utility road on each side of the Upper Truckee River. Project actions include striping and signage installation for a new Class 3 bike route on the existing pavement of West and East San Bernardino Avenues between North Upper Truckee Road and Apache Avenue, and the creation of a new Class 1 bike trail that follows an existing dirt road, crossing the Upper Truckee River. The Class 1 trail includes a paved travelway, boardwalk travelway at each end of the bridge crossing, and a low-profile bridge crossing the river. No trail facilities would be located within Waters of the United States but would span above them.

<u>Hazardous Materials.</u> According the Department of Toxic Substances Control, no hazardous waste facilities or contaminated sites are identified within the construction area or trail alignment (EnviroStor and GeoTracker, 2020).

<u>Airports and Schools.</u> The Lake Tahoe Environmental Science Magnet School is located approximately 200 feet from the Class 3 portion of the trail at Apache Avenue. The South Lake Tahoe Airport is located approximately 1.5 miles northeast of the Project area. The Project area is located outside the airport Safety zones as mapped in the 2019 Airport Land Use Compatibility Plan.

<u>Fire.</u> Portions of the Project area, outside LTBMU-managed lands, are located within the Very High Hazard State Responsibility Area (CalFire, 2020). CalFire mapping does not indicate that the Project area is within a local responsibility area but does identify areas of Federal responsibility. The LTBMU Forest Plan Wildland Urban Interface (WUI) map indicates the Project area is located within the Defense Zone of the Wildland Urban Interface.

Environmental Analysis and Mitigation Measures

3.4.11-1. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (CEQA IXa)

<u>Standard of Significance:</u> Non-compliance with state and federal standards for transport and use of hazardous materials during construction of operation of the Project constitutes a significant impact. The Federal Hazardous Materials Transportation Act, California Health and Safety Code Division 20, and California Code of Regulations Titles 8 and 19 determine the regulatory standards.

Environmental Analysis: Less than Significant Impact.

No hazardous materials would be used or generated by Project operations. Construction activities may use fuels, lubricants, oils and other fluids to operate machinery. Generally, these materials would be stored within the paved staging areas and within the construction equipment. Hazardous materials used during construction would be transported, stored, and used in accordance with federal, state, and local regulations (e.g., CAA, CWA, Comprehensive Environmental Response, Compensation and Liability Act and the Toxic Substances Control Act). To minimize potential impact resulting from accidental spills or release, preparation of a Spill Response Plan, which is a required component of construction and operational SWPPPs, is required as discussed in the regulatory measures of the Project Description.

Required Mitigation: None.

3.4.11-2. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (CEQA IXb)

<u>Standard of Significance:</u> Non-compliance with state and federal standards for transport and use of hazardous materials during construction of operation of the Project constitutes a significant impact. The Federal Hazardous Materials Transportation Act, California Health and Safety Code Division 20, and California Code of Regulations Titles 8 and 19 determine the regulatory standards.

Environmental Analysis: Less than Significant Impact.

Project design and committed practices and compliance with federal and state regulations and permit programs avoid and minimize hazards to the public or the environment involving the release of hazardous materials into the environment. No hazardous materials would be present during operations and construction materials and equipment would be confined to the construction and staging area and remove following trail completion. As discussed in Question 3.4.11-1, the required spill response plan and SWPPP would ensure no hazardous release occurs.

3.4.11-3. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (CEQA IXc)

<u>Standard of Significance:</u> The transport or use of hazardous materials within one-quarter mile of a school constitutes a significant impact if the Project includes no measures ensuring public health and safety.

Environmental Analysis: Less than Significant Impact.

The Lake Tahoe Environmental Science Magnet School is located approximately 200 feet from the Class 3 portion of the trail at Apache Avenue. In this location, the project proposes to stripe the existing pavement and install directional signage. No substantially hazardous materials would be used for this process. The Class 1 trail would be located more than one-quarter mile from the school. While construction may use fuels, lubricants, oils, and other fluids used to operate machinery, Project operations would not emit or handle such materials. Regulatory compliance, as discussed in the Project Description, would ensure hazardous materials used during construction are not released and are handled properly.

Required Mitigation: None.

3.4.11-4. Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (CEQA IXd)

<u>Standard of Significance:</u> Project location on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 creates a significant hazard to the public or the environment.

Environmental Analysis: No Impact.

No hazardous waste facilities or contaminated sites are identified within the construction area or trail alignment (EnviroStor and GeoTracker, 2020).

Required Mitigation: None.

3.4.11-5. 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? (CEQA IXe)

<u>Standard of Significance:</u> Creation of a safety hazard to people residing or working in the vicinity of a private airstrip or public airport, or within the South lake Tahoe ALUCP results in a significant impact.

Environmental Analysis: No Impact.

The South Lake Tahoe Airport is located northeast of the Project area. The Project area is over 1.5 miles from the airport and is located completely outside the airport safety zones as mapped on Figure 4-4 of the airport's 2019 Airport Land Use Compatibility Plan (ALUCP) and is outside the noise impact area as mapped on Figure 4-1 of the ALUCP. The Project area is within the overflight notification zone; however, no safety hazard or excessive aircraft noise would be present.

3.4.11-6. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (CEQA IXf)

<u>Standard of Significance:</u> If impediments to emergency response or evacuation routes occur or response times fall below emergency response plan standards because of Project construction or operations, a significant impact occurs.

Environmental Analysis: No Impact.

The Project would construct Class 1 and Class 3 bicycle facilities and would improve connectivity between existing neighborhoods currently separated by the Upper Truckee River. Creation of the trail and connectivity between the immediate neighborhoods as well as with other existing trails in the area would improve emergency response and evacuation. Construction activities would not interfere with emergency response or evacuation as striping would not impair access and creation of the Class 1 trail would be outside area roadways.

Required Mitigation: None.

3.4.11-7. Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (CEQA IXg)

<u>Standard of Significance</u>: Project exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands a creates significant impact.

Environmental Analysis: Less than Significant Impact.

The Project does not propose new homes or habitable structures that would expose persons to increased wildfire risk. Development of the bike trail and bike route would not increase the wildfire risk for existing residences and recreational facilities in the area. The trail would improve evacuation and creates a fire break if wildland fire should occur.

Required Mitigation: None.

3.4.11-8. Will the Project involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions? (TRPA 10a)

<u>Standard of Significance</u>: Non-compliance with local, state and federal standards for transport and use of hazardous materials during construction of operation of the Project constitutes a significant impact. The Federal Hazardous Materials Transportation Act, California Health and Safety Code Division 20, and California Code of Regulations Titles 8 and 19 determine the regulatory standards. The County General Plan sets forth the goals, policies, and implementation plans related to public safety and hazards associated with hazardous materials that are applicable to the Project. Lahontan Board Order No. R6T-2016-0010 also outlines requirements for storage and handling of hazardous substances for construction projects within the California portion of the Lake Tahoe Basin.

Environmental Analysis: No Impact.

Construction of the Project involves the short-term use and storage of hazardous materials typical of a shared-use trail construction project (e.g., asphalt concrete, fuel, and paint for striping). Materials will be

used, stored, and disposed of in accordance with applicable federal, state, and local laws including Cal-OSHA, and Lahontan NPDES construction permit conditions and manufacturer's instructions. For transport to the project area, the CHP regulates transportation of hazardous materials on area roadways. The NPDES construction permit includes preparation of a site-specific spill prevention plan that addresses hazardous materials use, storage, transport, and disposal and management and containment of hazardous materials in the event of a spill. Compliance with NPDES construction permit requirements is sufficient to minimize risks associated with hazardous materials use.

Required Mitigation: None.

3.4.11-9. Will the Project involve possible interference with an emergency evacuation plan? (TRPA 10b)

<u>Standard of Significance:</u> If impediments to emergency response or evacuation routes occur or response times fall below emergency agency standards because of Project construction or operations, a significant impact occurs.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.11-6 above that concludes that implementation of the Project will not impact existing emergency evacuation plans.

Required Mitigation: None.

3.4.11-10. Will the Project result in creation of any health hazard or potential health hazard (excluding mental health)? (TRPA 17a)

<u>Standard of Significance:</u> Non-compliance with state and federal standards for transport and use of hazardous materials during construction of operation of the Project constitutes a significant impact. The Federal Hazardous Materials Transportation Act, California Health and Safety Code Division 20, and California Code of Regulations Titles 8 and 19 determine the regulatory standards.

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.11-1 through 3.4.11-4 above.

Required Mitigation: None.

3.4.11-11. Will the Project result in exposure of people to potential health hazards? (TRPA 17b)

<u>Standard of Significance:</u> Non-compliance with state and federal handling and disposal regulations and procedures during construction of operation of the Project constitutes a significant impact. The Federal Hazardous Materials Transportation Act, California Health and Safety Code Division 20, and California Code of Regulations Titles 8 and 19 determine the regulatory standards.

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.11-1 through 3.4.11-4 above.

3.4.12 Hydrology and Water Quality

This section presents the analyses for potential impacts to hydrology and water quality. Table 3.4.12-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.12-1: Hydrology and Water Quality				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.12-1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (CEQA Xa)			Х	
3.4.12-2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (CEQA Xb)			Х	
3.4.12-3. 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 off-site; iii) Create or contribute runoff water which would exceed the capacity of existing or planned			Х	
stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows? (CEQA Xc)				
3.4.12-4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (CEQA Xd)			X	

3.4.12-5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (CEQA Xe)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.12-6. Changes in currents, or the course or direction of water movements? (TRPA 3a)				X
3.4.12-7. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site? (TRPA 3b)				X
3.4.12-8. Alterations to the course or flow of 100-year flood waters? (TRPA 3c)				X
3.4.12-9. Change in the amount of surface water in any water body? (TRPA 3d)				X
3.4.12-10. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? (TRPA 3e)				X
3.4.12-11. Alteration of the direction or rate of flow of ground water? (TRPA 3f)				X
3.4.12-12. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? (TRPA 3g)				X
3.4.12-13. Substantial reduction in the amount of water otherwise available for public water supplies? (TRPA 3h)				X
3.4.12-14. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches? (TRPA 3i)				X
3.4.12-15. The potential discharge of contaminants to the groundwater or any alteration of groundwater				X

quality? (TRPA 3j)		
3.4.12-16. Is the Project located within 600 feet of a drinking water source? (TRPA 3k)		Х

Environmental Setting

The project area is located within the largest watershed in the Lake Tahoe Basin, the Upper Truckee River watershed. The Upper Truckee River watershed is approximately 10 miles in length and 6.5 miles in width with a slightly elongated shape and a spur in the northwest region encompassing the Echo Lake drainage. In general, the watershed consists of mountainous terrain within the unincorporated area of El Dorado County at elevation ranges from 6,320 feet to 9,590 feet. The banks of the Upper Truckee River exhibit destabilization of the stream corridor, displaying erosion and contribute significant amounts of sedimentation into the river. In addition to the Upper Truckee River, the project area contains three existing culverts to convey stormwater runoff underneath the existing roadway system.

The project is within the jurisdictional limits of the State of California, Lahontan Regional Water Quality Control Board (Lahontan). Lahontan uses the Water Quality Control Plan for the Lahontan Region (Basin Plan) as its regulating document. Lahontan identifies beneficial uses for the Upper Truckee River in Table 2-1 in the Basin Plan as: municipal and domestic supply, agricultural supply, groundwater recharge, navigation, water contact recreation and noncontact recreation, commercial and sport fishing, cold freshwater habitat, wildlife habitat, migration of aquatic organisms, spawning, reproduction, and development of fish and wildlife.

A Feasibility Study (FS) was developed by the County pursuant to the Storm Water Quality Improvement Committee (SWQIC) guidelines for EIP projects in the Tahoe Basin. The Feasibility Report, included as Appendix H provides figures, methodology, and detailed information about the hydrology, hydraulics, and water quality at the proposed project site.

The FS identifies water quality objectives for the project. Objectives represent physical conditions that can be measured to assess the success of a project in achieving a project goal. As discussed in the Project Description, one of the project goals is to provide drainage improvements resulting in a reduction in fine (less than 20 microns) and coarse sediment, and reduction in stormwater runoff volume and peak flows leaving the project site and discharging into the Upper Truckee River.

The FS identifies the following water quality objectives:

- Reduce fine and coarse sediment, stormwater runoff volume, and peak flows by 33%, to the maximum extent practicable; and,
- Stabilize eroding cut slopes, roadside ditches, and capture road abrasives utilizing source control BMPs.

Hydrologic Conditions

A Draft Hydrologic Analysis Report prepared by the County in 2019 identified the following flows and water surface elevations along the Upper Truckee River in the vicinity of the proposed bridge crossing:

Return Period (flood frequency)	Peak Flow (cfs)*	Water Surface Elevation (feet)
50-year	4072	6296.96
100-year	8477	6297.55

*cfs: cubic feet per second

There are varying regulatory requirements associated with bridge design for freeboard between water surface elevation and bridge elevation (discussed in Regulatory Environment below).

Soil characteristics and Groundwater

Corestone Engineering, Inc. conducted a geotechnical investigation of the proposed project area. As part of the investigation, soil borings were collected in the vicinity of the proposed Upper Truckee River bridge crossing. Soil borings were completed in May of 2019. The soils profile throughout the project area typically consist of surficial silty to poorly graded sand with some gravel through 5 feet depth below existing ground surface and through a slightly deeper horizon (12.5 feet) near the Upper Truckee River. Beneath the gravelly soils are silt or very fine silty sand soils from about 5 to 10 feet beneath the ground surface. The underlying soils consist of fine to medium silty sand through the maximum depth of exploration, 41.5 feet beneath the existing ground surface.

Groundwater was encountered in each soil boring sample at variable depths ranging between 1.5 to 7 feet below the existing ground surface. Within the project alignment, the depth to groundwater generally becomes shallower as the site move towards the Upper Truckee River. Near the Upper Truckee River, the groundwater matched the existing river water level (County of El Dorado 2019).

The full Geotechnical Report is attached as Appendix J.

Floodplain and Regulatory Flood Zones

The Federal Emergency Management Agency (FEMA) has designated a floodplain associated with the Upper Truckee River (see Figure 3.4.12-1). Flood maps, known officially as Flood Insurance Rate Maps (FIRM), show areas of high- and moderate- to low-flood risk areas, designated by 'zones.' The floodplain designation for the project area is identified on FIRM map panels 06017C0632E and 06017C0631E, effective September 26, 2018.

The floodplain designations within the project area include:

- Zone AE: The bridge structure, abutments and footing, and the boardwalk approach structure is proposed within Zone AE, a 'Special Flood Hazard Area' regulatory floodway associated with the Upper Truckee River. This zone is also known as the 100-year floodplain. An area designated AE is considered high-risk represents a 1% annual chance of flooding with known base flood elevations provided.
- Zone X: Areas between the limits of the 100-year and 500-year flood. Zone X is the 0.2% annual chance (or 500-year) flood hazard, including areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. Zone X is considered a 'moderate' flood hazard area.

REGULATORY SETTING

Federal

Clean Water Act (CWA)

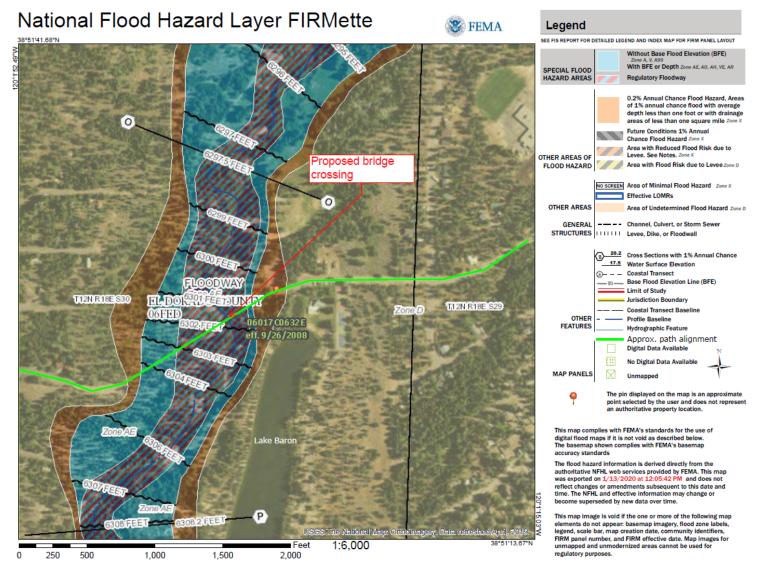
The CWA, passed in 1972, regulates and protects surface water quality across the United States. Sections 401 and 404 relate directly to local agency planning. Section 401 of the CWA requires a State Water Quality Certification for all federal permit or license applications for any activity that may result in a discharge to a water body to ensure compliance with state water quality standards. Most Certifications are issued in connection with Section 404 permits for dredge and fill discharges. Activities in waters of the U.S. that are regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects.

Section 303(d) of the CWA authorizes the US Environmental Protection Agency to assist jurisdictions in listing impaired waters and developing TMDLs for these waterbodies. A TMDL establishes the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality. In California, the State and Regional Water Boards assess water quality monitoring data for the state's surface waters every two years to determine if they contain pollutants at levels that exceed protective water quality standards. Water body and pollutants that exceed protective water quality standards. Water body and pollutants that exceed protective water quality standards. The determination is governed by the <u>Water Quality Control Policy for developing California's Clean Water Act Section 303(d) List.</u> Currently, the 2016 303(d) list is in effect.

Federal Emergency Management Agency

FEMA implements the National Flood Insurance Program. Per Section 60.3(d)(3) of the National Flood Insurance Program regulations regarding floodplain management, the placement of fill, new construction, substantial improvements, and other development within the adopted regulatory floodway cannot result in any increase in flood levels during occurrence of the base flood discharge (100-year event).

Figure 3.4.12-1 – Upper Truckee River Floodplain



Source: Federal Emergency Management Agency (FEMA) map panels 06017C0632E and 06017C0631E, effective September 26, 2018 (https://msc.fema.gov/portal/home)

State

As noted above, the project is within the jurisdictional limits of the State of California, Lahontan Regional Water Quality Control Board. Lahontan uses the Water Quality Control Plan for the Lahontan Region (Basin Plan) as its regulating document. The Basin Plan sets forth water quality standards for the surface and ground waters of the Region.

The project is subject to Order No. R6T-2017-0010 which renewed the updated waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) Permit (No. CAG616001) for stormwater and urban runoff discharges from portions of El Dorado County lying within the Lake Tahoe Hydrologic Unit. Under this order, El Dorado County is required as a 'permittee' to develop and implement a Stormwater Management Plan (SWMP) to minimize water quality impacts resulting from various municipal activities.

Because the proposed project would disturb more than 1 acre, it is subject to the Lahontan Region Construction General Permit Order R6T-2016-0010, which regulates stormwater leaving construction sites in the Lake Tahoe Hydrologic Unit. Under this order, site owners must notify the state and implement a Stormwater Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer. The SWPPP must outline measures which will protect hydrology and water quality resources, including groundwater, from negative impacts during construction through implementation of BMPs, a Dewatering Plan, Spill Prevention Plan, and monitoring the effectiveness of BMPs. This permit is administered by the State Water Resources Control Board and overseen by the Water Board.

<u>Caltrans</u>

The drainage analysis conducted by El Dorado County (2019) was prepared to ensure that the proposed bridge will meet the specific design standards provided by El Dorado County, Department of Transportation (DOT) and Caltrans. DOT does not provide specific freeboard (the vertical clearance between the lowest structural member and the water surface elevation of the design flood) design criteria. However, the County has a practice of designing freeboard based on Caltrans Highway Design Manual. The proposed bridge design will satisfy the following standards and design criteria:

- County of El Dorado Drainage Manual, dated March 1995
- Caltrans Local Assistance Procedure Manual, Chapter 11, dated July 23, 20062
 - The basic rule for hydraulic design of bridges is that they should be designed to pass the two percent (2%) probability flood or tide (50-year) or the flood-of-record, whichever is greater without causing objectionable backwater, excessive flow velocities, or encroaching on through traffic lanes. Sufficient freeboard, the vertical clearance between the lowest structural member, and the water surface elevation of the design flood should be provided. A minimum freeboard of 2 feet is often assumed for preliminary bridge design.
 - The final design should be able to convey the base flood, (100-year food)
 - The minimum design flood for foundation analysis should be the base flood. Bridges with scourable beds should withstand the effects of the base flood without failure.
- Caltrans Highway Design Manual, dated December 2018

- The basic rule for the hydraulic design of bridges is that they should pass a 2% probability flood (50-year).
- Freeboard, sufficient to accommodate the effects of the bedload and debris should be provided. Alternatively, a waterway area sufficient to pass the 1 percent probability flood without freeboard should be provided. Two feet of freeboard is often assumed for preliminary bridge design.

Local

Tahoe Regional Planning Agency

The TRPA Code of Ordinances contains requirements and standards intended to achieve water quality thresholds, goals, and policies. TRPA Code Chapter 60 - *Water Quality*, includes requirements for installation of best management practices (BMPs) and standards for grading and excavation. The following TRPA water quality standards that apply to the project are as follows: Section 60.4 – runoff shall be controlled with implementation of BMPs; Chapter 35 – regulations pertaining to development, grading or filling of lands within 100-year floodplains, recognition of natural hazards including development within floodplains (with certain exceptions for public service projects); Chapter 33.3 – standards for grading and excavation, including requirement of grading to take place between May 1 and October 15.

Environmental Analysis and Mitigation Measures

3.4.12-1. Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (CEQA Xa)

<u>Standard of Significance</u>: A significant impact results if the project results in a violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

Environmental Analysis: Less than Significant Impact.

Grading, excavation and general ground disturbance associated with construction of the project may have the potential to cause direct and indirect short-term impacts to surface water and beneficial uses and contribute to polluted stormwater runoff discharging to the Upper Truckee River. For the proposed bridge and boardwalk structures, shallow groundwater associated with SEZ may be encountered during installation of abutments and pier footings, requiring dewatering during construction.

As a water quality protection design feature, the project proposes to install drainage facilities as needed for the paved Class 1 trail segments to slow runoff. Facilities would consist of infiltration channels/swales, rock slope protection and rock dissipators. The facilities would capture runoff and allow for infiltration to prevent sediment transport to the Upper Truckee River; therefore, concentrated runoff from modified impervious surfaces and slopes associated with construction of the Class 1 trail is not anticipated and there would be no long-term impacts to water quality once constructed.

As discussed in the Regulatory Environment, the project would require the County to prepare and submit a SWPPP to Lahontan to comply with the Stormwater General Permit. The purpose of the SWPPP is to protect soil and water resources from impacts during construction, including groundwater. Protection of soil and water resources during construction would protect the beneficial uses of the Upper Truckee River. As part of the SWPPP, the contractor will be required to prepare and adhere to a Temporary BMP Plan, a Spill Contingency Plan, and a Dewatering Plan that will be approved by El Dorado County. The plan would designate BMPs to minimize impact from erosion and sedimentation. Construction site stormwater BMPs would follow the Caltrans Construction Site BMPs Manual (Caltrans 2017) and the TRPA BMP Handbook (TRPA 2014) to control and minimize the impacts of construction related activities to water quality. Design features and construction controls have been incorporated into the project during planning and design and are intended to avoid, reduce and minimize potential effects to surface water quality and beneficial uses.

The following controls, at a minimum, would be required at the site during construction:

- Temporary erosion and sediment control BMPs to prevent the transport of earthen materials and other construction waste materials from disturbed land areas, stockpiles, and staging areas during periods of precipitation or runoff (such as silt fence, erosion control fabric, fiber rolls)
- Tracking controls (such as designated ingress and egress areas) and designated staging areas outside of drainage, swale, and SEZ areas. Staging area to be restored in accordance with TRPA Code Section 61.4 (Revegetation).
- Temporary BMPs to prevent wind erosion and sediment transport of disturbed areas, such as use of water for dust control and covering of stockpiles
- Limit grading to May 1 through October 15, unless an exemption is granted by TRPA, and a variance from the LRWQCB. At the end of the grading season or before completion of the project, all surplus or waste earthen materials from the project site would be removed and disposed of at a TRPA approved disposal site or stabilized on-site in accordance with TRPA and Lahontan regulations.
- Include a Spill Prevention Plan as part of the SWPPP to plan for responding to and avoiding accidental spills during construction. Project contractors would be responsible for storing on-site materials and temporary BMPs capable of capturing and containing pollutants.
- Develop and implement a Dewatering Plan as a SWPPP component.
- Use of vegetation protection fencing to prevent damage to trees or other vegetation where possible
- Use of construction boundary fencing to limit land disturbance to areas not planned for construction

Because the project must comply with requirements to implement a project specific SWPPP, SWMP, and the associated BMPs, potential construction related impacts to surface water quality and beneficial uses of the Upper Truckee River would be less than significant.

For groundwater resources, the project would require placement of support abutments/footings for the bridge and boardwalk structure approximately 8 feet in depth below ground surface. As indicated by the groundwater boring data collected in 2019, groundwater was encountered as shallow as 1.5 feet below ground surface. Therefore, groundwater interception during construction is anticipated.

According to the TRPA Code of Ordinances, excavations over 5 feet in depth or that may interfere with groundwater is prohibited unless the following findings can be made (TRPA Code subsection 33.3.6B):

- A soils/hydrologic report has been prepared and approved by TRPA, and demonstrates that no interference or interception of groundwater will occur as a result of project excavation; and
- The excavation is designed such that no tree removal occurs to mature trees, except where tree removal is allowed pursuant to Subsection 33.6.5: Tree Removal, including root systems and hydrologic conditions of the soil. To ensure the protection of vegetation necessary for screening, a special vegetation protection report shall be prepared by a qualified professional identifying measures necessary to ensure damage will not occur as a result of the excavation; and
- Excavated material is disposed of pursuant to subsection 33.3.4: Disposal of Materials, and the project area's natural topography is maintained. If groundwater interception or interference will occur as demonstrated by a soils/hydrologic report, then the excavation can be made as an exception provided that measures are included in the project to maintain groundwater flows to avoid adverse impacts to SEZ vegetation and to prevent any groundwater or subsurface water flow from leaving the project area as surface flow.

The project design element directly addresses and minimizes impacts from excavation, grading or filling to reduce potential impacts to soils and will continue to do so as part of the final design. For construction of the bridge and boardwalk approach structures within SEZ, additional measures would be implemented to avoid water quality impacts from interception of groundwater. These measures include defining specific work zones and protection for existing vegetation through measures such as dry-season construction and protection of ground disturbance for footings construction. Excavation for the bridge abutment and support footing would likely encounter groundwater. The Dewatering Plan, a SWPPP component, requires project features to include capture, storage, and appropriate discharge for groundwater.

Components of the Dewatering Plan would require that excavation sites be protected with sandbags, water berms, siltation fences, or other Lahontan approved techniques. Localized pumping shall clear the construction area of turbid standing water. Pumped water could be used to irrigate planted vegetation, sprayed on uplands to allow infiltration within the project area, held in Baker Tanks, or otherwise treated to remove suspended sediment to comply with the requirements of Board Order No. R6T-2017-0010.

Additionally, as part of the final project approvals, the County is required to submit an obtain a TRPA Soils/Hydrologic report (TRPA Code subsection 33.3.6B). The report includes a summary of the geologic, soil, and hydrologic conditions expected to be encountered within the project corridor and the qualifications of the personnel conducting the soil/hydrologic investigation. The report would also be required to including measures to ensure groundwater flows are maintained to avoid impact to SEZ vegetation and to prevent groundwater from leaving the site as surface water. Compliance with TRPA Code subsection 33.3.6B would ensure groundwater quality, movement, and SEZ vegetation is minimized during construction.

Because the project is required to comply with local, state, and federal requirements for protection of surface and groundwater quality during construction, implementation of the required controls would ensure that the project would not result in a violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

3.4.12-2. Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (CEQA Xb)

<u>Standard of Significance</u>: A significant impact results if the Project installs improvements that intercept groundwater or otherwise cause substantial changes in existing groundwater quality, quantity, elevations or movement; requires excavations greater than five (5) feet that will intercept groundwater; or fails to comply with Lahontan requirements for disposal of groundwater during construction, as outlined in TRPA revised Code Chapters 33 and 60, Lahontan Basin Plan Chapter 5.7 and Lahontan Board Order No R6T-2011-0101.

Environmental Analysis: Less than Significant Impact.

As discussed in the Environmental Setting and Question 3.4.12-1, the project area contains shallow groundwater. Construction of bridge abutments and support footing, in addition to construction of the raised boardwalk structure, could intercept groundwater for a period of time during construction, affecting both groundwater quantity and movement. The project will address this effect, if necessary, by constructing during the driest conditions possible, and by implementing a Dewatering Plan that reduces short-term impacts. Once constructed, the project would have no effect on groundwater quantity.

As part of project design, groundwater infiltration of surface runoff is accommodated along the length of the shared-use trail alignment. Trail drainage design elements, including the installation of drainage facilities where required to slow runoff, would capture and allow for infiltration. These drainage features, in addition to the Dewatering Plan implemented during construction, would maintain the existing direction and rate of groundwater.

Implementation of the Dewatering Plan and design drainage features of the trail ensures compliance with requirements for protection of groundwater during construction as outlined in TRPA Code 33 and Lahontan Basin Plan Chapter 5.7 and Board Order No. R6T-2017-0010.

Required Mitigation: None.

3.4.12-3. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (CEQA Xc):

3.4.12-3.i) Result in substantial erosion or siltation on- or off-site?

<u>Standard of Significance:</u> A significant impact occurs if the project results in alteration to existing drainage patterns, including addition of impervious surface, in a matter that results in substantial erosion or siltation.

Environmental Analysis: Less than Significant Impact.

The project does not propose impacts within the Upper Truckee River channel; there would be no impact to the existing drainage pattern of the river with potential to result in erosion or siltation offsite.

The project does propose an addition of impervious surface to the site by paving the proposed Class I trail segment in an existing two-track dirt road. The Class I segment of trial would begin at the end of pavement at West San Bernardino Avenue for a length of approximately 600 feet, ending at the proposed boardwalk structure approaching the bridge abutment. This asphalt trail would continue from the other

side of the bridge for a distance of 150 feet to the connection with the existing Tahoe Paradise Park parking lot, for a total addition of 750 linear feet of impervious surface paved trail (or 6,000 square feet total paved asphalt).

One of the goals of the proposed project is to provide treatment for sediment sources and other pollutants of primary concern. To address potential issues associated with addition of impervious surface, the project proposes drainage design features which would slow, capture, and infiltrate potential sediment laden runoff and prevent an increase in runoff volumes which have potential to cause erosion. Therefore, once the project is constructed, it would not result in substantial erosion or siltation on or off site, and would correct existing areas of erosion, thereby creating a beneficial impact.

During construction, implementation of the SWPPP and Dewatering Plan would ensure construction activities would not result in an increase in erosion or siltation on or off site.

Required Mitigation: None.

3.4.12-3.ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

<u>Standard of Significance:</u> A significant impact occurs if the project results in alteration to existing drainage patterns, including addition of impervious surface, in a matter that results in on or off-site flooding.

Environmental Analysis: Less than Significant Impact.

As discussed in the Environmental Setting, one of the goals of the proposed project is to reduce peak flows and volumes within the project area, while providing treatment for sediment sources and other pollutants of primary concern. The project proposes to obtain this by providing drainage design features, where required, to slow, capture, and infiltrate runoff to prevent runoff from leaving the project area as surface flow and discharging to the Upper Truckee River. These drainage features may include infiltration channels/swales, rock slope protection and rock dissipators. These design features address potential risk of flooding on or off site by capturing runoff from modified impervious surfaces and allowing for infiltration. Therefore, once the project is constructed, an improved storm water system would be in place, surface flows and volumes would likely be reduced from their existing condition, and significant impact would not occur as a result of the project.

During construction, grading and excavation would take place that may have a potential to cause increased surface runoff. However, with implementation of the required erosion and sediment construction control BMPs, construction of the proposed project would not substantially increase the rate or amount of surface runoff. Therefore, the proposed project will have a less than significant impact.

Required Mitigation: None.

3.4.12-3.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?

<u>Standard of Significance</u>: A significant impact occurs if the project results in alteration to existing drainage patterns, including addition of impervious surface, in a matter that results in substantial runoff that exceeds system capacity or creates polluted runoff.

Environmental Analysis: Less than Significant Impact.

Refer to discussion for Question 3.4.12-3.ii above. The project proposes drainage design features to accommodate surface runoff along the length of the shared-use trail alignment to prevent significant runoff from modified impervious areas. The drainage facilities would capture runoff, allow for infiltration, reduce volume of flow leaving the project site, and would ultimately improve quality of water entering the Upper Truckee River system consistent with the water quality goals and objectives for the project. Therefore, the project would not contribute to runoff in a manner which would exceed the capacity of existing or future stormwater drainage systems.

As noted Question 3.4.12-3.i above, grading and excavation would take place during construction that may have the potential to cause erosion. However, implementation of the required water quality construction controls, including use of erosion and sediment BMPs, SWPPP and Dewatering Plan would ensure potential impacts resulting from erosion and sediment transport during construction are less than significant.

Required Mitigation: None.

3.4.12-3.iv) Impede or redirect flood flows?

Standard of Significance: If the Project places structures that impede or redirect 100-year flood flows, a significant impact results.

Environmental Analysis: Less than Significant Impact.

The project proposes to construct a bridge structure and raised boardwalk approach that requires placement of fill within the FEMA designated 100-year flood zone.

As discussed in the Environmental Setting above, the County has a practice of designing freeboard based on the Caltrans Highway Design Manual (December 2018). The County has determined that compliance with the Caltrans bridge design requirements listed in the Environmental Setting is sufficient to avoid potentially significant flooding hazards.

Because it is County practice to design bridge structures in accordance with Caltrans bridge design requirements, final design of the bridge structure would ensure that the structure can retain the two percent (2%) probability flood (50-year) or the flood-of-record, whichever is greater, without causing objectionable backwater, excessive flow velocities, or encroaching on through traffic lanes; and be able to convey the base flood, (100-year flood), and withstand effects of the 100-year base-flood on scour without failure. Additionally, use of a raised boardwalk design with helical footings would further reduce impact within the floodplain.

Therefore, design elements would ensure that construction of the bridge structure and boardwalk approach within the 100-year flood zone (Zone AE) would not result in any increase, redirection, or impediment of flood flows during occurrence of the 100-year event, consistent with FEMA regulatory floodplain design requirements.

TRPA

The TRPA prohibits additional development, grading, and filling of lands within the 100-year floodplain except under conditioned project approvals that support the findings outlined in TRPA Code Subsection 35.4.2, which are presented as follows for proposed project:

Additional development, grading, and filling of lands within the 100-year floodplain are prohibited, except as follows:

TRPA Code Subsection 35.4.2.B: Public Service Facilities

TRPA may permit additional public service facilities within the 100-year floodplain if TRPA finds that:

1. The project is necessary for public health, safety, or environmental protection

Public health and safety: The project is necessary to address traffic and pedestrian safety operations at the intersection of Apache Avenue at East San Bernardino Avenue as identified in the Lake Tahoe Unified School District Safe Routes to School Master Plan found in Appendix D of the TRPA/TMPO Linking Tahoe: Active Transportation Plan, and improving the LTESMS frontage and driveway access. This Project will also connect to the future Apache Avenue Pedestrian Safety and Connectivity Project (EIP #03.01.01.0004) which is an El Dorado County-led effort to improve overall pedestrian and bicycle safety for students, parents and the community accessing LTESMS, Apache Avenue and Meyers. Implementation of the project would result in creation of a safe, non-motorized transportation network designed to AASHTO and ADA standards.

Environmental protection: The San Bernardino Class 1 Bike Trail Project is identified as TRPA Environmental Improvement Program Project #03.01.02.0040. Construction of the shared-use trail will create an alternative (non-motorized) transportation system which would have beneficial impact to improved air quality and reduced atmospheric contribution to water quality degradation. Air quality and climate change analyses determine that project contributes to improvements in air quality and GHG emissions.

2. There is no reasonable alternative, including spans, that avoids or reduces the extent of encroachment in a floodplain area; or

The Feasibility Report prepared by the County identified alignment alternatives, compiled BMP alternatives for mitigating specific problem areas, and presented the evaluation of the alternatives. Following these steps, a preferred alternative was selected and documented in a Preferred Project Alternative Memoranda based on input from the public meetings, correspondence received, and the results of the analyses contained in the 2018 Feasibility Report. Both the Feasibility Report and Alternative Memoranda are attached (Appendices H and I).

Three alignment alternatives were evaluated for the project, for the Class 1 section of the path, as it was assumed the remaining portion of the project will be a Class 3 along the existing roadway sections. A brief summary of the Alternatives considered are as follows. A detailed discussion is provided in the Feasibility Report.

Alternative 1: Most direct alignment following the existing disturbed, compacted trail

Alignment 1 generally follows the existing disturbed trail beginning just east of West San Bernardino Avenue. Alternative 1 impacts floodplain, avoids direct impact to river.

Alternative 2: Avoids the steel sheet pile, proposed alignment is downstream to avoid conflicts

Alignment 2 is similar to Alternative 1 with a differing alignment and crossing point over the Upper Truckee River downstream of the existing steel sheet pile, to the paved parking lot at the Park. Alternative 2 impacts floodplain, avoids direct impact to river.

Alternative 3: Utilizes the sewer access road in the northerly direction and potentially avoids floodplain impacts; requires work in active Upper Truckee River channel

Alignment 3 is longer alignment veering to the north along the utility access road and crosses the Park just south of the existing picnic area. This alignment would require bank stabilization and work in the active river to remove log jam and debris field, would require longer path length, and would result in potentially greater disturbance in environmentally sensitive areas.

Results: As discussed throughout, the preferred project proposes design features specific to reducing impact to the floodplain, SEZ, and avoids direct impact to the Upper Truckee River channel. The bridge structure is designed span the width of the active river channel and to clear the 100-year base flood elevation. Use of a boardwalk approach structure with helical pier footings instead of a paved trail approach reduces overall impact within the floodplain. The County has determined that this preferred alternative reduces the extent of encroachment in a floodplain to the extent possible.

3. The impacts on the floodplain are minimized.

As discussed in item 2 above, the preferred alternative minimizes impacts on the floodplain to the extent possible. The project incorporates design features that reduce disturbance and the effects of disturbance, including alignment location, use of boardwalk and bridge spans.

Required Mitigation: None.

3.4.12-4. Would the Project occur in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (CEQA Xd)

<u>Standard of Significance:</u> An increased risk of pollutant release during inundation as a result of Project installation constitutes a significant impact.

Environmental Analysis: Less than Significant Impact.

As discussed in the Environmental Setting and Question 3.4.12-3, a portion of the project area is within Special Flood Hazard Zone AE, associated with the Upper Truckee River floodplain. The project does not propose to construct features, which once in place, would have potential to release pollutants in the event of flooding. As a permanent BMP drainage feature, paved trail segments would include newly constructed drainage facilities as needed to slow and capture runoff for infiltration; therefore, in the event of flooding, sediment would not be carried as a pollutant to the Upper Truckee River.

Implementation of the project SWPPP, including the Spill Prevention Plan and Dewatering Plan, and use of required erosion and sediment BMPs would prevent the risk of pollutants being released during construction.

Required Mitigation: None.

3.4.12-5. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (CEQA Xe)

<u>Standard of Significance</u>. A significant impact would occur if the project conflicts with or obstructs implementation of a water quality control plan or sustainable groundwater management plan.

Environmental Analysis: No Impact.

The Project would not violate, alter, or revise the regulations pertaining to water quality control plans or sustainable groundwater management plans applicable to the area. The Lahontan Basin Plan sets forth water quality standards for the surface and ground waters of the Region. As discussed in Question 3.4.12-1, the proposed project would not result in a violation of the applicable water quality standards and therefore would comply with the Basin Plan. Additionally, the project would comply with Chapter 60 of the TRPA Code of Ordinances (Water Quality) which includes standards for discharge limits to surface and ground waters by implementing a project SWPPP, Dewatering Plan, and permanent drainage design features to comply with TRPA discharge limits. The TRPA Lake Tahoe Water Quality Management Plan (208 Plan) would continue to apply to the area and the project proposes no changes to this plan.

Required Mitigation: None.

3.4.12-6. Will the Project result in changes in currents, or the course or direction of water movements? (TRPA 3a)

<u>Standard of Significance</u>. A significant impact occurs if the Project reroutes water movements such that new channels are formed or flow rates increase.

Environmental Analysis: No Impact.

Refer to the discussion and analysis for Question 3.4.12-3ii. Project does not propose features which have potential to result in change to currents, or the course or direction of water movements. There are no proposed impacts within the Upper Truckee River channel.

Required Mitigation: None.

3.4.12-7. Will the Project result in changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site? (TRPA 3b)

<u>Standard of Significance</u>: A significant impact to surface water occurs if the Project results in increases in runoff from disturbed area because of compaction, vegetation removal and impervious surfaces such that the 20-year, 1-hour storm volume cannot be captured by existing or proposed stormwater drainage systems, as defined by TRPA Code Chapter 60. TRPA Code Subsection 60.4.6 requires infiltration facilities to discharge runoff to groundwater except as provided in Subsection 60.4.8, which allows for approval of alternative BMPs to meet water quality standards under special circumstances that include bike trails.

Environmental Analysis: No Impact.

See discussions and analyses for Question 3.4.12-3. Drainage design features would be constructed as part of the project to ensure the 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) is contained on site. The project would comply with TRPA Code Chapter 60.

Required Mitigation: None.

3.4.12-8. Will the Project result in alterations to the course or flow of 100-year floodwaters? (TRPA 3c)

Standard of Significance. See Question 3.4.12-iv

Environmental Analysis: No Impact.

See discussions and analysis for Question 3.4.12-iv that concludes the project boardwalk and bridge structures would not impede or redirect 100-yr floodwaters and the level of impact is less than significant. The project is anticipated to meet the TRPA Code exemption requirements for filling within 100-year floodplain per subsection 35.4.2.B - Public Service Facilities.

Required Mitigation: None.

3.4.12-9. Will the Project result in change in the amount of surface water in any water body? (TRPA 3d)

<u>Standard of Significance:</u> If the Project results in a change in the amount of surface water in a water body, a significant impact results as defined by TRPA Code Chapter 60.

Environmental Analysis: No Impact.

The project proposes to implement a raised boardwalk feature, bridge span, and drainage features associated with the paved path segments to avoid interruption of existing surface water and groundwater movement towards the river and SEZ. The three existing culverts located underneath the existing roadway system in the project area would be maintained, or replaced, to provide improved drainage function; flows in the three existing culvert locations would be maintained.

Required Mitigation: None.

3.4.12-10. Will the Project result in discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? (TRPA 3e)

Standard of Significance. See Question 3.4.12-1.

Environmental Analysis: No Impact.

See discussions and analysis for Question 3.4.12-1 above which concludes the level of impact to surface water quality and beneficial uses is less than significant. Construction and operation of the project would not cause alternation to surface water quality nor contribute towards non-attainment of TRPA Thresholds.

Required Mitigation: None.

3.4.12-11. Will the Project result in alteration of the direction or rate of flow of ground water? (TRPA 3f)

Standard of Significance: See Question 3.4.12-2.

Environmental Analysis: No Impact.

See analysis for Question 3.4.12-2, which concludes the level of impact to groundwater movement is less than significant.

3.4.12-12. Will the Project result in change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? (TRPA 3g)

Standard of Significance. See Questions 3.4.12-1 and 3.4.12-2.

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.12-1 and 3.4.12-2 which conclude the level of impact to groundwater quantity is less than significant.

Required Mitigation: None.

3.4.12-13. Will the Project result in substantial reduction in the amount of water otherwise available for public water supplies? (TRPA 3h)

<u>Standard of Significance:</u> If the Project creates a demand that exceeds available water supplies, a significant impact to source water occurs as defined in TRPA Code Chapter 60.

Environmental Analysis: No Impact.

The project does not propose features which would result in the demand for new or expanded water supplies; therefore, there is no impact.

Required Mitigation: None.

3.4.12-14. Will the Project result in exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches? (TRPA 3i)

Standard of Significance: See Question 3.4.12-3iv

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.12-3iv, which concludes that the project would not result in the creation of significant hazards associated with the 100-year storm occurrence.

The project does not increase exposure of people or property to other significant water related hazards such as wave action or seiches.

Required Mitigation: None.

3.4.12-15. Will the Project result in potential discharge of contaminants to the groundwater or any alteration of groundwater quality? (TRPA 3j)

Standard of Significance: See Questions 3.4.12-1 and 3.4.12-2.

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.12-1 and 3.4.12-2 above. Potential project impacts to groundwater would be less than significant.

3.4.12-16. Is the Project located within 600 feet of a drinking water source? (TRPA 3k)

<u>Standard of Significance</u>: A contaminating land use within 600 feet of a drinking water source identified on TRPA Source Water Assessment Maps constitutes a significant impact as defined by TRPA Code Section 60.3.

Environmental Analysis: No Impact.

The project area is not located within 600 feet of drinking water sources and is outside the mapped source water protection zones for existing wells.

3.4.13 Land Use and Planning

This section presents the analyses for potential impacts to land use and planning. Table 3.4.13-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.13-1: Land Use and Planning				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.13-1. Physically divide an established community? (CEQA XIa)				Х
3.4.13-2. 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? (CEQA XIb)			Х	
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.13-3. Include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan? (TRPA 8a)				X
3.4.13-4. Expand or intensify an existing non-conforming use? (TRPA 8b)				Х

Environmental Setting

The Project is located on land managed by the USFS LTBMU, Tahoe Paradise Park and Recreation District, and El Dorado County.

The Class 1 portion of the Project is located within the Meyers Community Plan, crossing land designated as Conservation and zoned Upper Truckee River Corridor – MAP 5, and designated as Recreation and zoned Meyers Recreation – MAP-4. According to the Community Plan, non-motorized public trails are a permitted use in both zones. These lands are also within TRPA Plan Area Statement (PAS) 119 – Country Club Meadows and designated as Recreation. The areas are characterized in the Meyers Area Plan as follows:

Meyers Recreation (MAP-4) - The Meyers Recreation District provides outdoor recreation amenities for residents and visitors within walking distance of commercial and residential uses.

This district contains a variety of recreational opportunities including parks, a golf course, and developed campsites.

Upper Truckee River Corridor (MAP-5) - The Upper Truckee River Corridor includes public land surrounding the Upper Truckee River. The area is managed primarily for environmental values including watershed functions, conservation, and wildlife habitat connectivity. This district also provides for dispersed recreational uses including trails, trailheads, and cross-country skiing.

This Project is included in the Meyers Area Plan Transportation Element Recreation Element, and Implementation Element.

TRPA Plan Area Statements (PAS) provide a description of land use for a plan area, identify planning issues, and establish specific direction for planning policy for regional goals and policies. The Class 3 portions of the Project are located within PAS 133 Tahoe Paradise-Upper Truckee (West San Bernardino Avenue) and PAS 124 - Meyers Residential (East San Bernardino Avenue). Both PAS 133 and PAS 124 have a Land Use Classification of Residential, with a "Mitigation" Management Strategy. The Planning Statement for PAS 124 states, "The area should continue to be residential, maintaining the existing character of the neighborhood." The Planning Statement for PAS 133 and 124, trails are an allowed use and transportation routes are a special use. The County adopted TRPA's PAS, which act as a zoning equivalent in the Lake Tahoe Basin.

<u>LTBMU Forest Plan.</u> The project area is partially located on Santini-Burton/Urban Forest Parcels Management Area as defined in the LTBMU *Land Management Plan.* The management emphasis within this management area is on protecting watershed conditions and community open space. Urban Forest Parcels provide opportunity for dispersed recreation within the urban setting, such as walking/hiking, wildlife viewing, cross-country skiing, and access to streams and lakes. When appropriate, recreational improvements such as system trails and shared-use pathways may occur on urban forest parcels. The desired conditions, management strategies and management objectives are consistent with General Conservation Management Areas. According to the Forest Plan, "The Forest Service manages urban forest parcels as undeveloped open space for the purpose of preserving the hydrologic function of sensitive lands and conserving natural forest conditions within the urban setting."

- Manage urban forest as undeveloped parcels that provide open space and dispersed recreation opportunity.
- Manage stand densities on urban forest parcels to achieve and maintain healthy forest characteristics.
- Manage the continuity and arrangement of live and dead fuels to reduce risk of catastrophic fire, and to complement defensible space efforts on adjoining private lands. Urban Forest parcels are located within the urban zone of the wildland urban interface (WUI).
- Retain, protect, and restore aspen and riparian plant communities to enhance wetland function and provide habitat for disturbance tolerant species that utilize urban forests.
- Restore areas of existing human-caused disturbance, generally related to residential development, to control erosion and support natural watershed function.
- Prevent the introduction of non-native, invasive species and noxious weeds and contain existing populations.
- Mitigate all identified hazard trees as quickly as possible.

The Forest Plan includes the following objectives and standards related to Santini-Burton Acquired Lands/Urban Forest Parcels:

- **Obj42.** Complete initial fuels reduction and forest health restoration treatments as needed on all urban forest parcels by 2019.
- **Obj43.** Conduct follow-up fuels treatments every 10-15 years in urban forest parcels. **Obj44.** Restore and re-vegetate areas of existing disturbance on up to 20 urban forest parcels annually.
- **SG181.** Improvements shall not be placed on Santini-Burton acquired lands, other than for dispersed recreation, erosion control projects or permitted activities. [Standard]
- **SG182.** Manage Santini-Burton lots, or lots acquired under other authorities (including restricting certain recreation activities) consistent with the purpose by which the lot was acquired. [Standard]

Environmental Analysis and Mitigation Measures

3.4.13-1. Would the Project physically divide an established community? (CEQA XIa)

<u>Standard of Significance:</u> A significant impact results if the Project installs a structural impediment to vehicle or pedestrian movement in the community. The TRPA Regional Plan, Plan Area Statements and Code, and County General Plans determine this level of impact significance.

Environmental Analysis: No Impact.

The Project constructs a Class 1 trail through undeveloped land, joining residential neighborhoods with commercial and community service areas in the Meyers area. Development of the Class 3 Bike Route along existing roadway pavement would not result in a community division. This segment of the trail connects to other trail segments, providing greater non-motorized access in the community. The trail would provide a shared-use bicycle and pedestrian connection between the North Upper Truckee and Meyers neighborhoods currently separated by the Upper Truckee River. The trail alignment would also connect to user created trails along the Upper Truckee River (that connect to Washoe Meadows State Park), Tahoe Paradise Park, and the Lake Tahoe Environmental Science Magnet School. Since the Project does not divide the established community, rather it provides greater opportunities for movement and remediates an existing physical division.

Required Mitigation: None.

3.4.13-2. Would the Project 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? (CEQA XIb)

<u>Standard of Significance</u>: A significant impact results from non-compliance of the Project with land use plans, goals, policies, regulations or provisions as established by the TRPA Regional Plan Element and Code Chapter 21, Community Plans, and the Plan Area Statements the County General Plan, and the LTBMU Forest Plan.

Environmental Analysis: Less than Significant Impact.

The proposed trail and route are allowed uses. The Class 1 trail is within the Meyers Community Plan, which allows non-motorized trails in the MAP-4 and 5 zones. The Class 3 route is within Plan Area Statements 124 and 133, which allow transportation routes as a special use. Since the Class 3 portion would not create a new roadway, but merely utilize the existing roadways of East and West San Bernardino Avenues, no new transportation route is proposed, but a dual use of an existing route is proposed as signage and striping for the bike route would be added to these existing roads. The findings in TRPA Code Chapter 21.1 are easily met:

- A. The project to which the use pertains is of such a nature, scale, density, intensity, and type to be an appropriate use for the parcel on which and surrounding area in which it will be located.
 - 1. A Class 3 bike route is proposed on existing roads. This route is appropriate for neighborhood streets and would not cause an increase in land use density or use intensity.
- B. The project to which the use pertains will not be injurious or disturbing to the health, safety, enjoyment of property, or general welfare of persons or property in the neighborhood, or general welfare of the region, and the applicant has taken reasonable steps to protect against any such injury and to protect the land, water, and air resources of both the applicant's property and that of surrounding property owners.
 - 1. The use is beneficial to the neighborhood and the region. As discussed in the Project Description, the project would utilize best management practices and would comply with required permits and documentation to ensure resources are appropriately protected. The Class 3 construction would be limited to signage and striping, which would not result in property or impact to land, water, and air resources. Operation of the route would have a beneficial air quality impact.
- C. The project to which the use pertains will not change the character of the neighborhood, or detrimentally affect or alter the purpose of the applicable planning area statement, community plan, and specific or master plan, as the case may be.
 - 1. The Class 3 trail on existing roadways would not alter the neighborhood character and would be a benefit to area neighborhoods. The purpose of the PAS and Community Plan would not change.

In addition, the 2017 RTP/SCS lists the Project within the implementation program to reduce environmental effects of air emissions and associated VMT. Therefore, the Project would support this existing plan and the projects within the plan to reduce environmental effects.

The Meyers Community Plan includes policies related to the Project, which support Transportation Element Goal 6 "Encourage pedestrian and bicycle linkages between land uses. Accommodate pedestrians throughout the Area Plan by providing safe, functional pathways":

Policy 6.2: Support development of bicycle and pedestrian facilities identified in the Linking Tahoe: Active Transportation Plan including, but not limited to, the Greenway Multi-Use Trail, and the Upper Truckee River crossing at San Bernardino Avenue.

Policy 6.7: Promote non-motorized trail access between residential areas including the North Upper Truckee and Country Club Estates neighborhoods, Meyers Town Center, and recreation sites.

And goals within the Recreation Element "Provide multi-use trails to connect Meyers with nearby recreation areas, residential neighborhoods, existing trails, and provide safe routes to school and other transportation benefits consistent with the Transportation Element."

Policy 2.1: Develop trail connections within and adjacent to the Plan Area. Specific projects include: constructing the South Tahoe Greenway Multi-Use Trail linking Meyers with South Lake Tahoe; and trail connections between Meyers and nearby national forest and Tahoe Conservancy lands, Washoe Meadows State Park, and Tahoe Paradise Park. Provide bike racks and short-term storage lockers in the Meyers Town Center to encourage bicycle use.

Therefore, the Project implements goals and policies in the Meyers Community Plan.

Portions of the Project alignment are within USFS LTBMU managed lands. These lands are within Santini-Burton Acquired Lands/Urban Forest Parcels. Urban Forest Parcels consist mainly of lands that have been acquired by purchase or donation, under authority of Public Law 96-586 (Santini-Burton Act) of December 23, 1980. The acquisition of environmentally sensitive lands authorized by this act is often referred to as the urban lot program. Trails are a suitable use in this area. The portion of the Upper Truckee River in the Project area is not identified within the Upper Truckee River Wild and Scenic River.

Many of the acquisitions are small lots (less than 1 acre) in urban subdivisions. The acquisition of urban lots serves three purposes:

- 1. Preventing residential development of environmentally sensitive lands;
- 2. Maintaining important areas within a watershed in a natural, undisturbed condition, allowing snowmelt water to infiltrate the soil surface and remove suspended sediments; and
- 3. Restoring lands in poor hydrologic condition.

LTBMU requires consistency with best practices for trail siting, as outlined in USFS Trails Management Handbook. The design of the trail crossing LTBMU-managed lands is compatible with practices outlined in this handbook. This handbook primarily addresses non-paved hiking trails; however, it also includes guidelines for general trail accessibility, boardwalks and other features. The Project is designed in compliance with ADA standards and Forest Service Trail Accessibility Guidelines, meeting the accessibility guidelines in the Handbook. Where the Project is located within LTBMU-managed urban lands (Santini-Burton Acquired Lands/Urban Forest Parcels), the trail utilizes appropriate design measures for an urban setting. SEZ exists in the alignment and the Project proposes a mixture of paved trail and boardwalk over an existing dirt utility road.

Required Mitigation: None.

3.4.13-3. Will the Project include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan? (TRPA 8a)

<u>Standard of Significance:</u> A significant impact results from inconsistency with permissible land uses established in Plan Area Statements 133 and 124, and the Meyers Area Plan.

Environmental Analysis: No Impact.

See response to Question 3.4.13-2.

Required Mitigation: None.

3.4.13-4. Will the Project expand or intensify an existing non-conforming use? (TRPA 8b)

<u>Standard of Significance:</u> A significant impact results from expansion of an existing non-conforming use that is in conflict with permissible land uses as established in TRPA Plan Area Statements or Area Plan.

Environmental Analysis: No Impact.

Construction of an approved trail, considered a special use, will not expand or intensify an existing nonconforming use because the Project is a new use and not an existing non-conforming use. Pedestrian and bike trails are conforming uses.

3.4.14 Mineral Resources (CEQA) and Natural Resources (TRPA)

This section presents the analyses for potential impacts to mineral resources and natural resources. Table 3.4.14-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.14-1: Mineral Resources and Natural Resources				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.14-1. 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? (CEQA XIIa)				X
3.4.14-2. 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? (CEQA XIIb)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.14-3. A substantial increase in the rate of use of any natural resources? (TRPA 9a)				Х
3.4.14-4. Substantial depletion of any non-renewable natural resource? (TRPA 9b)				X

Environmental Setting

According to the California Department of Conservation, the Project area contains no mineral resources of value to the region or residents of the State of California (CDOC 2020), nor does it include the substantial use of any non-renewable natural resources.

Environmental Analysis and Mitigation Measures

3.4.14-1. Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (CEQA XIIa)

<u>Standard of Significance:</u> A significant impact occurs if the Project creates a loss of availability of mineral resources that are valuable to the region.

Environmental Analysis: No Impact.

The project area contains no mineral resources areas, and therefore, the Project creates no impact to such resources.

Required Mitigation: None.

3.4.14-2. Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (CEQA XIIb)

<u>Standard of Significance:</u> A significant impact occurs if the Project creates a loss of availability of locally important mineral resource recovery sites.

Environmental Analysis: No Impact.

The project area contains no mineral resource recovery sites, and therefore, the Project creates no impact to such sites. See discussion and analysis for Question 5.4.14-1 above.

Required Mitigation: None.

3.4.14-3. Will the Project result in a substantial increase in the rate of use of any natural resources? (TRPA 9a)

<u>Standard of Significance:</u> A significant impact occurs if the Project creates a substantial increase in the rate of use of natural resources.

Environmental Analysis: No Impact.

The Project does not create population increases or facilities that could substantially increase the rate of use of natural resources and thus creates no impact to such resources.

Required Mitigation: None.

3.4.14-4. Will the Project result in a substantial depletion of any non-renewable natural resource? (TRPA 9b)

<u>Standard of Significance</u>: A significant impact occurs if the Project creates a substantial depletion of nonrenewable resources.

Environmental Analysis: No Impact.

The Project does not include facilities or actions that cause depletion of non-renewable natural resources and thus creates no impact to such resources.

3.4.15 Noise

This section presents the analyses for potential impacts related to noise. Table 3.4.15-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.15-1: Noise				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.15-1. 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 other applicable local, state, or federal standards? (CEQA XIIIa)			Х	
3.4.15-2. Generation of excessive groundborne vibration or groundborne noise levels? (CEQA XIIIb)			Х	
3.4.15-3. 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? (CEQA XIIIc)				Х
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.15-4. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan? (TRPA 6a)				X
3.4.15-5. Exposure of people to severe noise levels? (TRPA 6b)				Х
3.4.15-6. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold? (TRPA 6c)				X
3.4.15-7. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible? (TRPA 6d)				X

3.4.15-8. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses? (TRPA 6e)	Х
3.4.15-9. Exposure of existing structures to levels of ground vibration that could result in structural damage? (TRPA 6f)	X

Environmental Setting

Land uses in the project area include recreation, open space, and residential uses. The main sources of noise are from vehicular traffic along residential roadways and park events.

<u>Noise</u>. Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. *Noise* can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic loudness scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called *A-weighting*, which is written "dBA." In general, human sound perception is such that a change in sound level of 3 dB is just noticeable; a change of 5 dB is clearly noticeable; and a change of 10 dB is perceived as doubling or halving sound level.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this analysis.

- **Sound.** A vibratory disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism such as the human ear or a microphone.
- Noise. Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Ambient Noise.** The composite of noise from all sources near and far in a given environment exclusive of particular noise sources to be measured.
- **Decibel (dB).** A unit less measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
- Maximum and Minimum Sound Levels (L_{max} and L_{min}). The maximum or minimum sound level measured during a measurement period.
- Community Noise Equivalent Level (CNEL). The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels

occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

<u>Noise Sources</u>. Noise sources in the area include noise from traffic traveling on roadways, aircraft overflights, and recreational activities.

<u>Noise Sensitive Land Uses.</u> Noise sensitive land uses are generally defined as locations where people reside or where the presence of noise could adversely affect the use of the land. Typical noise-sensitive land uses include residences schools, hospitals, and parks. Recreational activities found in the project area are not considered to be noise-sensitive land uses because they are transitory in nature with exposure of users typically being less than one hour. Noise-sensitive land uses in the project area that could be affected by the project include adjacent residences and the Lake Tahoe Environmental Science Magnet School.

<u>Blasting.</u> Blasting is unlikely given the soil conditions in the Project area. The two primary environmental effects of blasting are airblast and groundborne vibration. Blasting creates seismic waves that radiate along the surface of the earth and downward into the earth. These surface waves can be felt as ground vibration. Ground vibration can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes decrease with increasing distance. As seismic waves travel outward from a blast, they excite the particles of rock and soil through which they pass and cause them to oscillate. The actual distance that these particles move is usually only a few tenthousandths to a few thousandths of an inch. The rate or velocity (in inches per second) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the peak particle velocity (ppv).

<u>Vibration</u>. Operation of heavy construction equipment, particularly pile driving and other impact devices, such as pavement breakers, create seismic waves that radiate along the surface of the earth and downward into the earth. These surface waves can be felt as ground vibration. Vibration from operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes will decrease with increasing distance. Perceptible ground-borne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity (in inches per second) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the peak particle velocity (PPV).

State, TRPA and County Noise Regulations. There are no applicable state regulations that pertain to noise in the project area.

The 1987 Regional Plan for the Lake Tahoe Basin provides for the achievement and maintenance of the adopted environmental threshold carrying capacities (thresholds) while providing opportunities for orderly growth and development. TRPA noise thresholds are contained in the Land Use Element of Regional Plan. Noise thresholds have been established for aircraft noise sources; single-event noise sources (i.e., noise from boats, motor vehicles, motorcycles, off-road vehicles, and snowmobiles that occur in a nonregular or nonrepetitive manner); and community noise levels, which are used to determine land use compatibility. The TRPA community noise threshold for high density residential and for urban outdoor recreation areas is 55 dBA and low-density residential areas is 50 dBA.

TRPA and the County adopted an outdoor CNEL standard for PAS 124 (50 CNEL), PAS 133 (50 CNEL), and the Meyers Area Plan (50 dBA for the upper Truckee River Corridor and 55 dBA for the Upper Truckee Residential/Tourist District and the Meyers Recreation District.

Chapter 68 (Noise Limitations) from the TRPA Code establishes noise limitations for areas within TRPA's jurisdiction. Section 68.9 stipulates that TRPA-approved construction or maintenance projects, or the demolition of structures, are exempt from TRPA's Code of Ordinances Noise Limitations if the activities occur between the hours 8:00 a.m. and 6:30 p.m.

El Dorado County's General Plan noise policies provide protection from noise by requiring noise analysis and mitigation when proposed uses are likely to exceed established noise limits (See policies under Health Safety and Noise Element Objective 6.5.1). The analysis will address the potential for adverse noise levels based on the criteria contained in Table 6-2 of the County General Plan.

Environmental Analysis and Mitigation Measures

3.4.15-1. Would the Project generate 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 other applicable local, state, or federal standards? (CEQA XIIIa)

<u>Standard of Significance:</u> Exceedance of CNEL limits stated in project area PASs and Regional and County noise ordinances constitutes a significant noise impact.

Environmental Analysis: Less than Significant Impact.

Even the busiest shared-use trails in the United States are extremely quiet, with little noise created other than the occasional low volume conversation, barely audible beyond 10 or 20 feet of the trail edge. Walking, running, dog walking, and bicycling, by their nature, generate virtually no noise. Potential sources of greater volumes, such as platoons of bicyclists or congregating teenagers, are occasional and sporadic. Operation of the Class 1 and Class 3 route would not result in an increase in ambient noise levels as the trails would be used for non-motorized pedestrian and bicycle access. Noise levels would essentially remain the same. The Project has the opportunity to reduce motorized vehicle noise by replacing individual auto trips with pedestrian and bicycle trips.

Construction would result in noise producing activities, representing a short term impact at any one location. Based on standard equipment noise levels, noise levels at 50 feet from individual pieces of equipment would typically range from between 83 to 96 dBA for the project (US Environmental Protection Agency, 1991). Along the Class 3 segment, the construction nearest to sensitive receptors would consist of pavement striping and signage placement. Along the Class 1 segment of the Project, in which heavy construction equipment would be used, two nearby residences are located approximately 100 feet from the beginning of the Class 1 portion of the alignment. A majority of residences are 200 to 300 feet from the beginning of the Class 1 trail and farther from the trail segments closer to the Upper Truckee River. Based on a typical noise-attenuation rate of 6 dBA per doubling of distance, noise levels at the typical sensitive receptor (homes on West San Bernardino Avenue) would be less than 55 dBA. For some homes at the end of West San Bernardino Avenue, and during construction at the entrance to the Class 1 trail, daytime noise levels could exceed 65 dBA. Project compliance measures place noise controls on construction equipment, locate construction equipment and staging areas to minimize noise effects, restrict construction vehicle idling during periods of non-use, and restrict noise-generating construction activities to the hours between 8:00 a.m. and 6:30 p.m., Monday through Saturday, during which such activities are exempt from the TRPA noise standards. Compliance with TRPA noise control measures would reduce construction noise impacts to a less than significant level.

Required Mitigation: None.

3.4.15-2. Would the Project generate excessive groundborne vibration or groundborne noise levels? (CEQA XIIIb)

<u>Standard of Significance</u>: 30 CFR Part 816 defines a significant impact as a vibrational increase greater than 1 inch/second peak particle velocity, as based on typical characteristics of Project equipment and materials.

Environmental Analysis: Less than Significant Impact.

Trail operations do not create groundborne vibration. Construction activities associated with the operation of heavy equipment during construction could generate localized groundborne vibration. Vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than 50 feet from the receptor. Additionally, vibration from these activities is of limited duration and ends when construction is completed. The trail passes close to residences along West and East San Bernardino Avenues; however, in these areas, construction would be limited to pavement striping and signage installation. Construction groundborne vibration will be temporary and intermittent.

Vibration and airblast could occur if blasting techniques are used for the bridge abutments. Based on soil analyses along the project area, blasting is unlikely and only minimal blasting would occur if needed at the bridge loation. Blasting requirements depends on the soundness of the rock. Human response to blast vibration and airblast is difficult to quantify. Vibration and airblast can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does blast frequency. Blast events are relatively short, on the order of several seconds for sequentially delayed blasts. Generally, as blast duration and vibration frequency increase, the potential for adverse human response increases. Areas of trail that may require blasting would be over 800 feet from residences such that the potential for impacts to structures or residences from groundbourne vibration is reduced to a level of less than significant.

Required Mitigation: None.

3.4.15-3. 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? (CEQA XIIIc)

<u>Standard of Significance:</u> Exposure of people residing or working in the project area to excessive noise levels from aircraft results in a significant impact.

Environmental Analysis: No Impact.

The South Lake Tahoe Airport is located northeast of the Project area. The Project area is over 1.5 miles from the airport and is located completely outside the airport safety zones as mapped on Figure 4-4 of the airport's 2019 Airport Land Use Compatibility Plan (ALUCP) and is outside the noise impact area as mapped on Figure 4-1 of the ALUCP. The Project area is within the overflight notification zone; however, no noise hazard would be present.

3.4.15-4. Would the Project result in increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Area Plan or Master Plan? (TRPA 6a)

<u>Standard of Significance:</u> Exceedance of CNEL limits stated in project area PASs, Area Plan, and Regional noise ordinances constitutes a significant noise impact.

Environmental Analysis: No Impact.

See the response to Question 3.4.15-1, above.

Required Mitigation: None.

3.4.15-5. Would the Project result in exposure of people to severe noise levels? (TRPA 6b)

<u>Standard of Significance:</u> Exceedance of CNEL limits stated in project area PASs, Area Plan, and Regional noise ordinances constitutes a significant noise impact.

Environmental Analysis: No Impact.

See the response to Question 3.4.15-1, above.

Construction activities associated typically involve the use of noise-generating equipment such as excavators, pavers, graders, dump trucks, generators, backhoes, compactors, and loaders. Noise levels associated with these types of equipment are typically between 83 and 96 dBA at 50 feet. In unique circumstances, specialized construction equipment (such as pile drivers) or techniques (such as blasting) that are inherently louder than typical construction equipment (typically between 94 and 101 dBA at 50 feet) may be required (TRPA 2012a: pages 3.6-16 and 3.6-17). Construction activities that occur between 8:00 a.m. and 6:30 p.m. are exempt from TRPA CNEL standards.

TRPA adopted (November 20, 2013) additional best construction practices policies regarding noise generation. The TRPA Standard Conditions of Approval for Grading Projects (TRPA Permit Attachment Q) include new construction provisions that call for the location of construction staging areas as far as feasible from sensitive air pollution receptors (e.g. schools or hospitals), closure of engine doors during operation except for engine maintenance, location of stationary equipment (e.g. generators or pumps) as far as feasible from noise-sensitive receptors and residential areas, installation of temporary sound barriers for stationary equipment, and use of sonic pile driving instead of impact pile driving, wherever feasible.

Project operations would result in no severe noise events. Therefore, the Project would not result in a significant impact.

Required Mitigation: None.

3.4.15-6. Will the Project result in single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold? (TRPA 6c)

<u>Standard of Significance:</u> Exceedance of CNEL limits stated in project area PASs, Area Plan, and Regional noise ordinances constitutes a significant noise impact.

Environmental Analysis: No Impact.

See Question 3.4.15-2. It would be highly unlikely that blasting would be required. If needed, it would be within an area away from sensitive receptors. Noise experienced in the surrounding neighborhoods during construction would not exceed noise thresholds.

Required Mitigation: None.

3.4.15-7. Will the Project result in the placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible? (TRPA 6d)

Standard of Significance: A significant impact occurs if residential or tourist accommodations are located in an area where the existing ambient noise level exceeds 60 dBA.

Environmental Analysis: No Impact.

The Project does not propose new residential or tourist accommodations and is not located in an area where the existing CNEL exceeds 60 dBA.

Required Mitigation: None.

3.4.15-8. Will the Project result in the placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses? (TRPA 6e)

<u>Standard of Significance:</u> A significant impact occurs if trail use generates noise levels above 60 dBA in areas of residential or tourist accommodation uses.

Environmental Analysis: No Impact.

See Question 3.4.15-1. Operation and use of the trail would not generate noise such that ambient noise levels would rise above existing conditions.

Required Mitigation: None.

3.4.15-9. Will the Project expose existing structures to levels of ground vibration that could result in structural damage? (TRPA 6f)

<u>Standard of Significance</u>: 30 CFR Part 816 defines a significant impact as a vibrational increase greater than 1 inch/second peak particle velocity, as based on typical characteristics of Project equipment and materials.

Environmental Analysis: No Impact.

See the response to Question 3.4.15-2, above.

3.4.16 Population and Housing

This section presents the analyses for potential impacts to population and housing. Table 3.4.16-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.16-1: Population and Housing				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
3.4.16-1. 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)? (CEQA XIVa)			Х	
3.4.16-2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (CEQA XIVb)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
3.4.16-3. Alter the location, distribution, density, or growth rate of the human population planned for the Region? (TRPA 11a)				X
3.4.16-4. Include or result in the temporary or permanent displacement of residents? (TRPA 11b)				X

3.4.16-5. Affect existing housing, or create a demand for additional housing? To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions: (1) Will the proposal decrease the amount of housing in the Tahoe Region? (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households? (TRPA 12a)	X
3.4.16-6. Will the proposal result in the loss of housing for lower-income and very-low-income households? (TRPA 12b)	Х

Environmental Setting

The Project is located in El Dorado County in the unincorporated community of Meyers. The alignment runs along County right of way, USFS LTBMU managed land, and the Tahoe Paradise Park, connecting the North Upper Truckee and Meyers neighborhoods. The population in Meyers is approximately 29,100 persons, or roughly 11,700 households. There are approximately 24,350 housing units in the area, of which roughly half are resident occupied. According to 2017 statistics, approximately 3,770 people live below the poverty line, with the median household income at 53,060 (2017 US Census American Community Survey).

The Meyers Area Plan directs the growth of population and residential uses in the Meyers Area.

Environmental Analysis and Mitigation Measures

3.4.16-1. Would the Project 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)? (CEQA XIVa)

<u>Standard of Significance:</u> A significant impact results from direct and indirect population growth in excess of the growth anticipated in the TRPA Regional Plan, as disclosed in the Land Use Element and PASs.

Environmental Analysis: Less than Significant Impact.

The Project installs a shared-use trail linking existing neighborhoods to commercial centers and neighborhood facilities but proposes no new homes or businesses. A temporary increase in population due to construction activities would not occur as the construction would most likely be completed by the existing labor pool in the area.

The addition of the Project to the community could increase the desirability of the adjacent neighborhoods because the shared-use trail offers an alternative transportation link to various sites within the community. However, the Project proposal provides for no long-term employment, educational opportunities, or other population-generating features known to increase local populations.

Required Mitigation: None.

3.4.16-2. Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (CEQA XIVb)

<u>Standard of Significance:</u> Displacement of substantial numbers of people or housing that necessitates construction of replacement housing elsewhere creates a significant impact.

Environmental Analysis: No Impact.

The Project does not displace people or housing and thus creates no impact.

Required Mitigation: None.

3.4.16-3. Will the Project alter the location, distribution, density, or growth rate of the human population planned for the Region? (TRPA 11a)

<u>Standard of Significance:</u> Alteration to land use patterns not envisioned by the Regional Plan or City General Plan constitutes a significant impact to human population planned for the Region.

Environmental Analysis: No Impact.

The Project creates no new housing units or permanent employment opportunities. Because the Project improves non-motorized access between existing neighborhoods and community facilities, the desirability of residential neighborhoods benefitted by the trail has the potential to increase. No overall change in housing density or availability will occur, however, because housing is regulated and limited by TRPA. With no residential displacement, permanent employment opportunities or new housing developments, the Project results in no alteration of the location, distribution, density, or growth rate of the human population planned for the Region beyond that envisioned by the Regional Plan.

Required Mitigation: None.

3.4.16-4. Will the Project include or result in the temporary or permanent displacement of residents? (TRPA 11b)

<u>Standard of Significance:</u> Significant temporary or permanent displacement of residents results in a significant impact.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.16-1 above.

3.4.16-5. Will the Project affect existing housing, or create a demand for additional housing?

(1) Will the proposal decrease the amount of housing in the Tahoe Region? (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households? (TRPA 12a)

<u>Standard of Significance:</u> A significant impact occurs if the project results in a reduction in housing units, particularly affordable housing units.

Environmental Analysis: No Impact.

- (1) No decrease in housing is proposed.
- (2) There are no homes located in the Project alignment. Construction of a bike trail would not affect existing or future housing, or housing rented at affordable rates.

Required Mitigation: None.

3.4.16-6. Will the Project result in the loss of housing for lower-income and very-low-income households? (TRPA 12b)

<u>Standard of Significance:</u> A significant impact occurs if the project results in a reduction in housing units for lower- or very low-income households.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.16-5 above.

3.4.17 Public Services

This section presents the analyses for potential impacts to public services. Table 3.4.17-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.17-1: Public Services						
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact		
3.4.17-1. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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?			Х			
Police protection?			X			
Schools?			Х			
Parks?			Х			
Other public facilities? (CEQA XVa)			X			
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No		
Will the proposal have an unplanned of the following areas?	effect upon, or resu	Ilt in a need for new	v or altered governmen	ntal services in any		
3.4.17-2. Fire protection? (TRPA 14a)				X		
3.4.17-3. Police protection? (TRPA 14b)				X		
3.4.17-4. Schools? (TRPA 14c)				X		
3.4.17-5. Parks or other recreational facilities? (TRPA 14d)				X		
3.4.17-6. Maintenance of public facilities, including roads? (TRPA 14e)				x		
3.4.17-7. Other governmental services? (TRPA 14f)				X		

Environmental Setting

Law Enforcement: The El Dorado County Sheriff's Office provides law enforcement services within the area. The office is located at 1360 Johnson Boulevard, in South Lake Tahoe. The California Highway Patrol (CHP) Valley Division, which consists of the greater Sacramento area and the Sierra Nevada foothills to the west, is responsible for all traffic related incidents and assists the El Dorado County Sheriff's Department when necessary. The CHP area office is located at 2063 Hopi Avenue in Meyers. The Valley Division oversees four major highways and miles of county roads in the Region including US 50 and SR 89. Jail facilities are managed by the El Dorado County Sheriff's Department and are located at 1051 Al Tahoe Boulevard. The jail is a Type II facility and may house both pre-sentenced and postsentenced male and female defendants. The jail has a capacity of 158 beds. The El Dorado County General Plan public service policies ensure that the County would provide adequate law enforcement services and the necessary funding to ensure adequate law enforcement services and future facilities to meet demands (Public Services and Utilities Element Policy 5.7.3.1).

On LTBMU parcels, the Forest Service Law Enforcement and Investigation Department enforce federal laws protecting the land, resources, and visitors. The LTBMU office is located at 35 College Drive in South Lake Tahoe. Uniformed Law Enforcement Officers (LEOs) enforce federal laws governing National Forest Lands and resources. While they patrol for safety and provide emergency medical aid, they also investigate timber theft and wildfires, protect archaeological and biological resources, and enforce federal laws and regulations. The Law Enforcement and Investigation Department works in cooperation with local law enforcement agencies.

<u>Fire Protection</u>: The Lake Valley Fire Protection District (LVFPD) is a municipal fire department that is primarily organized, equipped, and trained to perform fire suppression duties in structural firefighting, initial attack wildland firefighting, vehicular fires, and initial attack for most incipient events. The LVFPD also provides local paramedic ambulance service. The LVFPD operates Station 7 in the Meyers community. In addition, the LVFPD maintains mutual aid agreements with other fire and emergency response agencies in the Tahoe Region, including the South Lake Tahoe Fire District, and the Forest Service, providing for area-wide fire response and ambulance services both in and outside the community. The LTBMU Tallac Hand Crew provides land management agencies with wildland fire suppression and fuel management resources. In the summer, as many as 130 to 150 staff members are based out of the Meyers Work Center. The LTBMU also operates a fire station (formerly the LVFD station) next to the new LVFD fire station on Keetak Street in the Meyers Industrial District.

Depending on the initial location of the fire and mutual aid agreements, wildfire suppression in the project area or vicinity is provided by the Lake Valley Fire Protection District, Calfire, or the LTBMU. A MOU between these agencies provides mutual aid and assistance to suppress wildfires and protect structures. Initial wildfire suppression responsibilities are divided into three categories based on land ownership or MOUs: Local Responsibility Areas (LRAs) include City and County areas, State Responsibility Areas (SRAs) include State lands, and Federal Responsibility Areas (FRAs) include LTBMU lands.

<u>Schools:</u> The Lake Tahoe Unified School District (LTUSD) serves a 10.1 square mile area that includes the Meyers community. LTUSD operates one school, the Lake Tahoe Environmental Science Magnet School, near the Project area on Apache Avenue.

<u>Parks</u>: The Project is located within the Tahoe Paradise Park and Recreation District facilities. This park includes Lake Baron, south of the alignment, for non-motorized aquatic recreation, sport courts, picnic areas, a clubhouse, playground, and trails. Washoe Meadows State Park is located north of the Project area, along with the Lake Tahoe Golf Course. Washoe Meadows remains undeveloped and consists of

valley meadows and woodlands. The Project also passes through USFS LTBMU land, specifically land managed as Santini-Burton/Urban Forest.

<u>Other Government Facilities:</u> The Project area is served by El Dorado County. There are numerous public service facilities in the Meyers community, including: the Meyers Post Office located in the Meyers Community Center District; the California Highway Patrol Area Office near the agricultural inspection station in the Meyers Community Center District; the Caltrans Meyers Maintenance Station in the Meyers Industrial District; the Department of Food and Agriculture Meyers Inspection Station along US 50 near the center of the Plan Area; the California Conservation Corps (CCC) facility in the Meyers Community Center District; the Lake Valley Fire Protection District fire station and training center (Station 7) in the Meyers Industrial District; the El Dorado County Community Development Agency, Transportation Division (EDCTD) road maintenance and snow removal facility in the Meyers Industrial District; El Dorado County Search and Rescue – Lake Tahoe Unit in the Meyers Community Center District; and the LTBMU Meyers Work Center and Meyers Inter-Agency Visitors Center in the in the Meyers Community Center District.

Environmental Analysis and Mitigation Measures

3.4.17-1. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities? (CEQA XVa)

<u>Standard of Significance:</u> A significant impact results to governmental and public services if the Project causes an increase demand for personnel, equipment or infrastructure beyond that planned by public service entities, the TRPA Regional Plan or County General Plan.

Environmental Analysis: Less than Significant Impact.

Demand for fire protection could increase during construction. Construction equipment operation potentially increases fire risk, particularly in areas of brush or other ground-level fuel. The project includes a compliance measure for development and implementation of a Fire Suppression and Management Plan, to avoid impacts associated with construction-related fire events. The Fire Control Plan includes fire precaution, pre-suppression and suppression measures and includes requirements for on-site provision of equipment devices such as spark arrestors and fire extinguishers.

Class 3 trail construction along neighborhood roadways requires temporary lane closures but requires no full road closures, allowing for continued emergency vehicle and general circulation during construction. Class 1 trail construction occurs along a dirt utility road that is not accessible for non-emergency vehicles.

Demand for fire and police protection will remain at existing levels during trail operation. The trail will be built to a standard that allows emergency vehicles to pass and respond to emergencies on the trail. The project improves access between East and West San Bernardino Avenues, creating improved emergency access. Trail operations would not increase demand for fire and law enforcement protection.

The Project improves access to the Lake Tahoe Environmental Science Magnet School by improving bicycle and pedestrian access to the school from the Upper Truckee Residential neighborhood, which is currently cut off from the Meyers residential neighborhood by the Truckee River.

This connection also improves access for a wide diversity of users to Tahoe Paradise Park. Coordination with park managers during development of construction scheduling minimizes disruption of park use during construction.

See discussion and analysis in Question 3.4.17-5, below, for parks and recreation impacts.

Although maintenance of the trail would increase the need for government services, trail maintenance is planned by the County and would not require new government personnel or facilities to be developed. No other impact to government services would occur

Required Mitigation: None.

3.4.17-2. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: fire protection? (TRPA 14a)

<u>Standard of Significance:</u> A significant impact results if the Project causes an increase demand for personnel, equipment or infrastructure beyond that which is planned.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.17-1 above.

Required Mitigation: None.

3.4.17-3. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: police protection? (TRPA 14b)

<u>Standard of Significance:</u> A significant impact results if the Project causes an increase demand for personnel, equipment or infrastructure beyond that which is planned.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.17-1 above.

Required Mitigation: None.

3.4.17-4. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: schools? (TRPA 14c)

<u>Standard of Significance:</u> A significant impact results if the Project causes an increase demand for personnel, equipment or infrastructure beyond that which is planned.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.17-1 above.

3.4.17-5. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: parks or other recreational facilities? (TRPA 14d)

<u>Standard of Significance:</u> A significant impact results if the Project causes an increase demand for personnel, equipment or infrastructure beyond that which is planned

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.17-1 above. The Project improves access to recreational facilities, but does not result in an increase in demand.

Required Mitigation: None.

3.4.17-6. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services in maintenance of public facilities, including roads? (TRPA 14e)

<u>Standard of Significance:</u> If the Project creates new or altered unplanned effects to governmental services in maintenance of roads, a significant impact results.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.17-1 above.

Required Mitigation: None.

3.4.17-7. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services in other governmental services? (TRPA 14f)

<u>Standard of Significance:</u> If the Project creates new or altered unplanned effects to governmental services in maintenance of roads, a significant impact results.

Environmental Analysis: No Impact.

Outside of maintenance, which was planned when the project was authorized for permitting in 2019, the Project would not affect government services.

3.4.18 Recreation

This section presents the analyses for potential impacts to recreation. Table 3.4.18-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.18-1: Recreation					
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	
3.4.18-1. 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? (CEQA XVIa)			х		
3.4.18-2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (CEQA XVIa)			Х		
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No	
3.4.18-3. Create additional demand for recreation facilities? (TRPA 19a)				X	
3.4.18-4. Create additional recreation capacity? TRPA 19b)				X	
3.4.18-5. Have the potential to create conflicts between recreation uses, either existing or proposed? (TRPA 19c)				X	
3.4.18-6. Result in a decrease or loss of public access to any lake, waterway, or public lands? (TRPA 19d)				X	

Environmental Setting

The Project is located within the boundary of the Tahoe Paradise Park and Recreation District and USFS LTBMU national forest lands. The Park includes Lake Baron, south of the alignment, for non-motorized aquatic recreation, sport courts, picnic areas, a clubhouse, playground, and trails. The Project would connect the existing Park parking lot to a new Class 1 bike trail that would cross the Upper Truckee River to connect with West San Bernardino Avenue. Washoe Meadows State Park is located north of the

Project area, along with the Lake Tahoe Golf Course. Washoe Meadows remains undeveloped and consists of valley meadows and woodlands. The Project also passes through USFS LTBMU land west of the Upper Truckee River, specifically land managed as Santini-Burton/Urban Forest.

Environmental Analysis and Mitigation Measures

3.4.18-1. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (CEQA XVIa)

<u>Standard of Significance:</u> A significant impact results if the Project improves access to recreation facilities or public lands used for recreation by numbers sufficient to create new disturbance.

Environmental Analysis: Less than Significant Impact.

Although the trail would improve neighborhood connections and connection through Tahoe Paradise Park by non-motorized traffic, access to the Tahoe Paradise Park, Washoe Meadows State Park, and LTBMU lands currently exists. By increasing non-motorized access, park patrons may be encouraged to access these recreation areas by foot or bicycle rather than by motorized methods. Therefore, while access would increase, use of the park facilities is expected to remain nearly the same with a change only in the way patrons access the parks. No physical deterioration of the parks would occur as a result of the project.

Required Mitigation: None.

3.4.18-2. Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (CEQA XVIb)

<u>Standard of Significance:</u> A significant impact results if the Project requires the construction or expansion of recreational facilities that cause an adverse physical effect on the environment. The TRPA Regional Plan Recreation Element, PASs or Area Plans, and Thresholds determine this level of impact significance.

Environmental Analysis: Less than Significant Impact.

The trail serves primarily as a transportation route, although it may be use for recreational purposes. Impacts to the environment are analyzed in each subsection of Chapter 3 and appropriate mitigation measures are proposed. No new parks facilities are proposed.

Required Mitigation: None.

3.4.18-3. Will the Project create additional demand for recreation facilities? (TRPA 19a)

<u>Standard of Significance:</u> The Project does not create additional recreation demand; it meets existing recreation and transportation needs.

Environmental Analysis: No Impact.

Class 1 shared-use trails like the Project provide long, continuous routes for commuting or recreation trips. When they access destinations like parks and playing fields, they provide alternatives to automobile use that influence lifestyle choices for families and individuals. Trails create inexpensive and safe

opportunities for outdoor exercise and healthy lifestyles, including the opportunity for people to integrate exercise into their daily activity. Trails also create opportunities for personal interaction, neighborhood socialization, and community unity that can't occur when people are utilizing their cars. Since the Project provides access opportunities and does not increase population, a new demand for recreation facilities does not result.

Required Mitigation: None.

3.4.18-4. Will the Project create additional recreation capacity? (TRPA 19b)

<u>Standard of Significance:</u> Recreation capacity at Lake Tahoe is measured by TRPA with the allocation of Persons at One Time (PAOTs).

Environmental Analysis: No Impact.

Summer day use PAOTs are not assigned to new transportation facilities, such as the Project (TRPA Code Subsection 50.8.3.A.1).

Required Mitigation: None.

3.4.18-5. Will the Project have the potential to create conflicts between recreation uses, either existing or proposed? (TRPA 19c)

<u>Standard of Significance:</u> Elimination of or decreased viability of an existing or proposed recreation use caused by the construction and operation of the Project constitutes a significant impact.

Environmental Analysis: No Impact.

Recreational conflicts intensify when an increasingly diverse mix of social, cultural, and political interest groups make claim to what they perceive to be their fair share of a public resource. This can be due to perceived dissimilarity of attitudes and values associated to activities of different user groups. Four major factors have the potential to produce conflict when there is social contact between recreational users: activity style, resource specificity, mode of experience, and lifestyle tolerance. The Project proposal promotes shared-use by providing adequate width and acceptable grades capable of allowing different users simultaneous access without conflict. No conflict would occur between the use of the trail and the use of the park facilities.

Required Mitigation: None.

3.4.18-6. Will the Project result in a decrease or loss of public access to any lake, waterway, or public lands? (TRPA 19d)

<u>Standard of Significance:</u> A decrease or loss of public access to lakes, waterways or public lands as a result of Project construction and operation constitutes a significant impact.

Environmental Analysis: No Impact.

Project construction results in temporary (four month) restricted access along the Class 1 segment for purposes of public health and safety. Construction will not decrease public access to existing parks and neighborhoods outside of the active construction corridor.

Project operation would lead to an increase of non-motorized, public access to public lands and to the lake through non-motorized means, thereby supporting TRPA Recreation Threshold R-1. The Project connects with existing bike trails and pathways with connections to area neighborhoods and existing bike trails.

3.4.19 Transportation (CEQA) and Traffic and Circulation (TRPA)

This section presents the analyses for potential impacts to transportation, traffic and circulation. Table 3.4.19-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.19-1: Transportation, Traffic and Circulation					
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	
3.4.19-1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (CEQA XVIIa)			Х		
3.4.19-2. Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (CEQA XVIIb)			Х		
3.4.19-3. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (CEQA XVIIc)			Х		
3.4.19-4. Result in inadequate emergency access? (CEQA XVIId)			Х		
TRPA Initial Environmental Checklist Item	Yes,	No, With Mitigation	Data Insufficient	No	
3.4.19-5. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)? (TRPA 13a)				X	
3.4.19-6. Changes to existing parking facilities, or demand for new parking? (TRPA 13b)				Х	
3.4.19-7. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities? (TRPA 13c)				X	
3.4.19-8. Alterations to present patterns of circulation or movement of people and/or goods? (TRPA 13d)				X	
3.4.19-9. Alterations to waterborne, rail or air traffic? (TRPA 13e)				X	
3.4.19-10. Increase in traffic hazards to motor vehicles,				X	

bicyclists, or pedestrians? (TRPA 13f)				
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Environmental Setting

The Project is located in Meyers, CA along West and East San Bernardino Avenues, along land owned by the Tahoe Paradise Park and Recreation District, and on undeveloped USFS land. Currently there is no connection between these neighborhoods along North Upper Truckee Road and east Meyers except at US 50 to the south and Lake Tahoe Boulevard to the north. The Upper Truckee River divides these areas with no access other than at US 50 or Lake Tahoe Boulevard. West and East San Bernardino are paved county neighborhood roadways. The Class 1 portion of the Project would follow an existing dirt utility road.

Existing bike lanes are located along US 50 (Class 1) south of the Project, Apache Avenue (Class 2) at the eastern end of the Project, and North Upper Truckee Road (Class 2) at the western end of the Project. There are intermittent trails that extend from North Upper Truckee Road to Lake Tahoe Boulevard. At US 50, the existing Class 1 trail extends to Pioneer Trail, which has a Class 2 trail, and up to Sawmill Road (Class 1) which connects to the Class 2 Trail at Lake Tahoe Boulevard and extends to South Lake Tahoe.

The South Lake Tahoe Airport is located 1.5 miles northeast of the Project area, and the Project is located outside the airport's hazard zones and noise contour areas.

The Meyers Area Plan identifies the Project within the Implementation Element supporting Transportation and Circulation Element Goal 6 and Policies 6.1 and 6.2:

6. Goal: Encourage pedestrian and bicycle linkages between land uses. Accommodate pedestrians throughout the Area Plan by providing safe, functional pathways.

Policy 6.1: Continue to participate and support the TRPA and Lake Tahoe Unified School District Safe Routes to school program.

Policy 6.2: Support development of bicycle and pedestrian facilities identified in the Linking Tahoe: Active Transportation Plan including, but not limited to, the Greenway Multi-Use Trail, and the Upper Truckee River crossing at San Bernardino Avenue.

TRPA is the designated Regional Transportation Planning Agency in the Lake Tahoe Region and has established Level of Service (LOS) standards for roadways and intersections and Vehicle Miles of Travel (VMT) standards. TRPA and TMPO administer regional programs to reduce Vehicle Miles Travelled (VMT) and achieve regional VMT standards in the Tahoe Basin. The effect of daily trip generation is important as it relates to region-wide VMT. VMT is dependent on the origin and destination of persons traveling to and from uses within the area and the net increase in region-wide trips after accounting for transferred development. VMT is a measure of automobile travel within the transportation system, and an indicator of the degree of integration between the transportation system and planned uses (i.e., a lower VMT indicates greater beneficial integration of transportation systems and land uses to reduce personal vehicle travel). VMT is also a proxy for regional traffic congestion, as well as for air quality. TRPA adopted a VMT Threshold Standard of 2,067,600 VMT for air quality purposes, which represents a 10 percent reduction from the 1981 VMT level. The most recent estimate of annual VMT provided by TRPA is 1,937,070 (Linking Tahoe: Regional Transportation Plan, 2017).

Environmental Analysis and Mitigation Measures

3.4.19-1. Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (CEQA XVIIa)

Standard of Significance: Project conflicts with applicable plans, ordinances or policies regarding the circulation system.

Environmental Analysis: Less than Significant Impact.

The Project builds upon the Meyers Bikeway and provides a critical link to the bicycle network between the neighborhood on North Upper Truckee Road and the community of Meyers. The Project supports the Linking Tahoe: Active Transportation Plan, approved by the Tahoe Metropolitan Planning Organization in March 2016 and the Meyers Area Plan, approved in March 2018, as the Project is promoted in both documents.

The Project also addresses traffic and pedestrian safety operations at the intersection of Apache Avenue at East San Bernardino Avenue as identified in the Lake Tahoe Unified School District Safe Routes to School Master Plan. This Project will also connect to the Apache Avenue Pedestrian Safety and Connectivity Project (#03.01.01.0004) which is an El Dorado County-led effort to improve overall pedestrian and bicycle safety for students, parents and the community accessing LTESMS, Apache Avenue and Meyers.

The Project has a beneficial impact by implementing this improvement that is listed in various planning documents in regard to transportation improvements.

Required Mitigation: None.

3.4.19-2. Would the Project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (CEQA XVIIb)

<u>Standard of Significance:</u> An impact would occur if the Project causes a net increase in vehicle miles traveled (VMT) conflicting with adopted VMT thresholds.

Environmental Analysis: Less than Significant Impact.

Since the Project proposes an alternative, non-motorized travel route, a beneficial impact may result by replacing motorized VMT with pedestrian and bicycle trips. Creation of the Class 1 and 3 trail would improve school access safety as well, improving the number of students accessing the Lake Tahoe Environmental Science Magnet School by foot or bicycle. Therefore, the Project could result in a net decrease in VMT in the area. The Project would not alter, revise or conflict with an applicable congestion management program including but not limited to, level of service standards and travel demand measures, or other standards established by the congestion management agency for designated roads or highways. Improving bicycle facilities and connectivity would result in beneficial transportation impacts. No VMT increase is anticipated, therefore, potential impacts related to the VMT standard are considered to be less than significant.

3.4.19-3. Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (CEQA XVIIc)

<u>Standard of Significance:</u> Substantial increases in hazards resulting from the Project proposal or incompatible use of the trail create a significant impact.

Environmental Analysis: Less than Significant Impact.

No sharp curves are proposed. The Class 3 portion of the Project would be located on and follow the existing pavement of West and East San Bernardino Avenues. The new Class 1 segment would follow an existing dirt utility road but does not contain sharp turns and does not intersect with highly trafficked roads. Intersecting roads consist of other neighborhood roadways and access roadways within Tahoe Paradise Park. The trail would be used by residents and visitors in the area, and no incompatible uses would interfere with trail use. Like other roadways in the area, snow removal may occur; however, snow removal equipment serves to maintain use of the trail and new hazardous situations would not be created.

Required Mitigation: None.

3.4.19-4. Would the Project result in inadequate emergency access? (CEQA XVIId)

<u>Standard of Significance:</u> Inadequate access for emergency responders during Project construction and operations constitutes a significant impact.

Environmental Analysis: Less than Significant Impact.

See discussion and analysis for Questions 3.4.11-6, 3.4.11-9, and 3.4.17-1 above that conclude that implementation of the Project will not impact emergency evacuation plans or access.

Required Mitigation: None.

3.4.19-5. Will the Project result in generation of 100 or more new Daily Vehicle Trip Ends (DVTE)? (TRPA 13a)

Standard of Significance: If the Project results in the generation of 100 or more new DVTE, a significant impact results.

Environmental Analysis: No Impact.

As discussed in Question 3.4.19-2, no increase in traffic would occur and construction would not result in the generation of traffic above the 100 DVTE threshold.

Required Mitigation: None.

3.4.19-6. Will the Project result in changes to existing parking facilities, or demand for new parking? (TRPA 13b)

<u>Standard of Significance:</u> Change in use of existing parking facilities that create an unmet demand for new parking as a result of Project operations constitutes a significant impact.

Environmental Analysis: No Impact.

The Project would have no significant increase in trip generation and has the potential to promote pedestrian and non-auto access, potentially resulting in beneficial impacts. By improving access from the west to Tahoe Paradise Park, the demand for parking may decrease as vehicle trips are replaced with pedestrian and bicycle trips.

Required Mitigation: None.

3.4.19-7. Will the Project result in substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities? (TRPA 13c)

<u>Standard of Significance:</u> If the Project causes delay which degrades level of service on roadways to LOS E for more than four hours/day impacting vehicles and transit, or hinders pedestrian or bicycle travel, a significant impact results.

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.19-3, 3.4.19-5, 3.4.19-6, 3.4.19-8, 3.4.19-9 and 3.4.19-10. The Project would support the transportation system and improve bicycle and pedestrian facilities, expanding access and connections to neighborhoods currently limited by the Upper Truckee River. The Project implements the programs and policies in area planning and transportation plans.

Required Mitigation: None.

3.4.19-8. Will the Project result in alterations to present patterns of circulation or movement of people and/or goods? (TRPA 13d)

<u>Standard of Significance:</u> If the Project results in an alteration to present patterns so that circulation is substantially disrupted and/or public access cannot be met, a significant impact results.

Environmental Analysis: No Impact.

As discussed in Question 3.4.19-2, no increase in trip generation or VMT would result from Project implementation. The Project may reduce trips along US 50 by improving pedestrian and bicycle access between the Meyers and Upper Truckee neighborhoods. Residents of these areas may travel by foot or bicycle rather than individual vehicles, potentially reducing traffic on US 50 and associated VMT.

Required Mitigation: None.

3.4.19-9. Will the Project result in alterations to waterborne, rail or air traffic? (TRPA 13e)

<u>Standard of Significance:</u> Alterations to waterborne, rail or air traffic by Project construction or operations that result in service disruptions.

Environmental Analysis: No Impact.

No alterations to waterborne, rail or air traffic are proposed or would occur as a result of the Project.

3.4.19-10. Will the Project result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? (TRPA 13f)

Standard of Significance: Increases to traffic hazards at trail crossing locations.

Environmental Analysis: No Impact.

See Questions 3.4.19-1, 3.4.19-3, and 3.4.19-4. The Project has the potential to reduce traffic hazards by designating a Class 3 bike route on existing roadways with no bicycle or pedestrian facilities, and by creating a Class 1 trail off the Class 3 trail to create a non-motorized trail linkage between uses. The Project would have a beneficial impact and would promote implementation of the Lake Tahoe Unified School District Safe Routes to School Master Plan.

3.4.20 Tribal Cultural Resources (CEQA) and Archaeological/Historical (TRPA)

This section presents the analyses for potential impacts to tribal cultural, archaeological and historical resources, discussing the Project impacts on tribal cultural resources related to the disturbance of archaeological, historical, and Native American/traditional heritage resources. Table 3.4.20-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.20-1: Tribal Cultural Resources and Archaeological/Historical					
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	
Has a California Native American Tr 21080.3.1(b)? Yes: X No:	ibe requested consu	ltation in accordance	ce with Public Resour	ces Code section	
Would the project 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 the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
3.4.20-1. 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)? (CEQA XVIIIa)			X		
3.4.20-2. 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. (CEQA XVIIIb)			X		
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No	
3.4.20-3. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values? (TRPA 20d)				X	

3.4.20-4. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential		X
impact area? (TRPA 20e)		

Environmental Setting

As of the mid-1800s, the Washoe inhabited the region of the study area. A Hokan-speaking hunting and gathering group, the Washoe inhabited the chain of valleys along the eastern slope of the Sierra Nevada, from Honey Lake to Antelope Valley. The Pine Nut Mountains and the Virginia Range formed the eastern boundary of Washoe territory, while the western boundary extended several miles beyond the Sierra crest.

A great deal of information has been written about Washoe land use in the Tahoe Basin and their use of the region's resources. Lake Tahoe is the center of the Washoe world, both geographically and socially. Legendary and mythological associations to places within the basin are common. While they were an informal and flexible political collectivity, Washoe ethnography hints at a level of technological specialization and social complexity uncharacteristic of their neighbors in the Great Basin. Semi-sedentism and higher population densities, concepts of private property, and communal labor and ownership are reported and may have developed in conjunction with their residential and subsistence resource stability.

As discussed in Cultural Resources Section 3.4.7, based on the archival research and site reconnaissance conducted as part of the cultural resource investigations, the project area has low potential to contain undocumented pre-historic resources. Section 3.4.7 also details Caltrans, TRPA, and additional regulatory requirements that would be implemented during construction should undocumented resources be discovered during construction, including notification of the Washoe and UAIC tribes.

Native American Consultation

In accordance with Assembly Bill 52, as identified in the PRC Section 21080.3.1(b)(2) of CEQA and Section 106 of the National Historic Preservation Act, Native American tribes (tribes) identified by the Native American Heritage Commission (NAHC), must be invited to consult on projects.

Native American correspondence was initiated by NCE with a letter and attached maps to the NAHC on November 29, 2018. The letter requested a search of their Sacred Lands File (SLF) and a contact list for regional tribes that may have knowledge of cultural or tribal resources in the vicinity of the APE. A response was received from the NAHC on December 5, 2018 which indicated negative SLF results within the APE. An inquiry letter was mailed on County letterhead to the tribes identified by NAHC on January 3, 2019.

As of May 3, 2019, three of the identified Native American tribes have replied to the County's inquiry letters. The United Auburn Indian Community (UAIC) requested further project information and the NCIC records search results to determine the needs of further consultation. The Tsi Akim Maidu has deferred to the Washoe Tribe of Nevada and California for any additional follow-up or request to monitor the Project. The Washoe Tribe's initial response stated there is concern for adverse impacts to archaeological resources in the APE. It was requested by both the Washoe Tribe and UAIC that any should cultural resources be discovered during the intensive survey or in the event inadvertent cultural resources are discovered as a result of Project activities, that they be informed of the findings.

The County contacted the Washoe Tribe and the UAIC by telephone on August 22, 2019 and provided an electronic copy of the draft ASR to each tribe via email. The Washoe Tribe responded on August 22, 2019, stating they are not aware of cultural resources within the project area that may be affected by the proposed project.

As discussed in Section 3.47 - Cultural Resources, the UAIC had concerns that the extent of NCEs inventory did not include a prehistoric resource adjacent to the project APE and requested additional intensive survey be completed. Therefore, NCE conducted an additional intensive pedestrian survey for this site and verified that the resource does not extend into the project area/APE. Results of this additional survey effort were submitted back to the UAIC for concurrence. The UAIC responded that their concerns had been addressed and they had no further issues or concerns that the proposed project may impact the prehistoric site or known cultural resources.

The NAHC letter and response, and copies of tribal correspondence are provided in the attached ASR/HPSR (Appendix G).

Environmental Analysis and Mitigation Measures

3.4.20-1. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource 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)? (CEQA XVIIIa)?

<u>Standard of Significance</u>: A significant impact would occur if the Project fails to implement consultation under AB 52, or results in an adverse change in the significance of a tribal cultural resource 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).

Environmental Analysis: Less than Significant.

In accordance with Assembly Bill 52 (AB 52), tribes identified by the NAHC were invited to consult on the proposed project. There are no resources within the project area listed or recommended eligible for listing in CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k) (NCE 2019e). As discussed in the Environmental Setting section, the Washoe Tribe stated they are not aware of cultural resources within the project area that may be affected by the proposed project. After additional survey was conducted by NCE, the UAIC responded that there were no other concerns that the project may impact the prehistoric site adjacent to the APE or known cultural resources.

The tribes were consulted in accordance with AB 52 and there are no tribal cultural resources associated with the project. In addition, the project excavation depths would be less than 8 feet in depth (up to 8 feet for the two bridge abutments, other areas would require less cut) thus there is a negligible chance construction would reveal unanticipated resources. As discussed in Cultural Resources Section 3.47, in the event of inadvertent discovery, both the Washoe and UAIC would be notified, and compliance with federal, state, Caltrans, TRPA, and General Plan policies developed to avoid or mitigate for impacts associated with inadvertent discoveries, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; therefore, potential impacts would remain less than significant.

3.4.20-2. Would the Project cause a substantial adverse change in the significance of a tribal cultural 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. (CEQA XVIIIb)

<u>Standard of Significance:</u> Significant impacts to a Tribal Cultural Resource (TCR) are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c).

Environmental Analysis: Less than Significant.

See discussion and analysis for Question 3.4.20-1 above. Consultation with the Washoe and UAIC tribes confirmed there are no tribal cultural resources that could be affected by the project. TCRs that meet significant or importance criteria as defined in Public Resources Code Section 5024.1(c) were not identified within the project area, and the potential for unanticipated discoveries is very low with measures in place to mitigate the effects of discoveries during construction.

Required Mitigation: None

3.4.20-3. Does the Project have the potential to cause a physical change which would affect unique ethnic cultural values? (TRPA 20d)

<u>Standard of Significance</u>: Significant impact occur if the Project alters or significantly affects cultural resources or conflicts with Section 67 of the TRPA Code of Ordinances.

Environmental Analysis: No Impact.

See discussions and analyses for Questions 3.4.7-1, 3.4.7-4, and 3.4.7-5.

Implementation of federal and state regulations, TRPA Code (Chapter 67) and General Plan policies address protection of historic, cultural, archaeological and paleontological resources and provide processes to avoid or mitigate impacts to these resources. Therefore, any development associated with the project would not result in an adverse effect on unique ethnic cultural values.

Required Mitigation: None.

3.4.20-4. Will the Project restrict historic or pre-historic religious or sacred uses within the potential impact area? (TRPA 20e)

<u>Standard of Significance</u>: Significant impact occur if the Project alters or significantly affects cultural resources or conflicts with Section 67 of the TRPA Code of Ordinances.

Environmental Analysis: No Impact.

As discussed in Question 3.4.20-1 above, there were no tribal cultural resources, including historic or prehistoric religious or sacred uses, associated with the project area; therefore, there would be no impact.

3.4.21 Utilities and Service Systems (CEQA) and Utilities (TRPA)

This section presents the analysis for potential impacts to utilities and service systems. Table 3.4.21-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.21-1: Utilities and Service Systems					
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	
3.4.21-1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? (CEQA XIXa)				X	
3.4.21-2. Have sufficient water supplies available to serve the and reasonably foreseeable future development during normal, dry, and multiple dry years? (CEQA XIXb)				Х	
3.4.21-3. Result in a determination by the wastewater treatment provider that serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments? (CEQA XIXc)				X	
3.4.21-4. 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? (CEQA XIXd)			х		
3.4.21-5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (CEQA XIXe)				Х	

TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:				
3.4.21-6. Power or natural gas? (TRPA 16a)				Х
3.4.21-7. Communication systems? (TRPA 16b)				Х
3.4.21-8. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider? (TRPA 16c)				X
3.4.21-9. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider? (TRPA 16d)				X
3.4.21-10. Storm water drainage? (TRPA 16e)				Х
3.4.21-11. Solid waste and disposal? (TRPA 16f)				X

Environmental Setting

<u>Water and Wastewater.</u> Water service and sewage collection and treatment is provided by South Tahoe Public Utility District (STPUD). STPUD collects, treats, and exports the wastewater to Alpine County. Wastewater and water service are provided through underground pipes beneath the pavement of West and East San Bernardino Avenues. STPUD has installed sheet pile in the Upper Truckee River near the proposed bridge to protect an existing water line. The Project is not located in a source water protection zone. The nearest source water point is active well 03481105W11 located near the Lake Tahoe Environmental Science Magnet School.

Storm Water Drainage. El Dorado County operates storm water drainage facilities. Culvert 1 consists of a 24-inch diameter corrugated pipe with a dirt drainage collection and outlet channel on each side of the roadway. This culvert is located on East San Bernardino Avenue at Bakersfield Street. Culvert 2 is a 52-inch diameter metal culvert located beneath the pavement of West San Bernardino Avenue at Normuck Street. This culvert also flows through a dirt channel. Culvert 3 consists of 2 62-inch diameter metal culverts beneath West San Bernardino Avenue north of Shawnee Street that handles lows of Osgood Creek on either side of the roadway. A drainage channel parallels the road. Roadside drainage ditches run along the shoulder of San Bernardino Avenue.

<u>Solid Waste.</u> South Tahoe Refuse (STR) is under contract with this portion of El Dorado County to collect solid waste from area households and businesses as well as to process and transfer all solid waste for disposal or recycling. STR's main facility, which consists of a transfer station, materials recovery facility, and the Tahoe Basin Container Service, has a total permitted capacity of 370 tons per day, but currently receives 200 to 250 tons per day. Solid waste is transported to Lockwood Regional Landfill in

Storey County, NV, which receives approximately 4,000 tons per day and has a lifespan of approximately 150 years.

<u>Electricity and Natural Gas</u>. Electricity is provided to the area by Liberty Utilities, and natural gas is provided by Southwest Gas. Gas distribution lines are located beneath the pavement of West and East San Bernardino Avenues. Overhead utility poles support electrical lines along the area roadways.

<u>Telecommunications</u>. Telecommunication services are provided by a number of companies including AT&T and Charter. These companies provide television, internet, and telephone connection services throughout the Project area through above-ground infrastructure, as utility poles parallel the trail alignment.

Environmental Analysis and Mitigation Measures

3.4.21-1. Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? (CEQA XIXa)

<u>Standard of Significance:</u> Construction of new water, stormwater, wastewater, electric power, natural gas, or telecommunication facilities or expansion of existing facilities as a result of the Project constitutes a significant impact if new construction creates significant and immitigable environmental effects.

Environmental Analysis: No Impact.

The Project proposal includes no new housing that could increase resident populations in need of these services, no new non-residential facilities, and does not propose fixtures or features (e.g., restrooms) that require connections to water or wastewater. The Project installs no new permanent irrigation, restrooms, water fountains, lighting, or other fixtures requiring electrical or natural gas power. No new communications are proposed.

The Project proposes to construct a drainage channel along portions of the Class 1 trail. Approximately 250 feet east of the start of the Class 1 portion of the trail from West San Bernardino Avenue, a vegetated drainage channel would be located on both sides of the paved trail, boardwalk section, and at the bridge approach, ending in rock-lined dissipators. East of the bridge, a vegetated channel would be located on the south side of the trail, extending from the edge of pavement to a rock lined dissipator at approximately the eastern bridge abutment. The channels and basins would be located within upland habitat and would address existing erosion and sedimentation caused along the dirt utility road, thereby addressing an existing runoff inadequacy. TRPA Code Chapter 32 provides regulations for utilities and services. The Project complies with these regulations as no new water or wastewater utilities are required to operate the trail.

Required Mitigation: None.

3.4.21-2. Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? (CEQA XIXb)

<u>Standard of Significance:</u> As significant impact occurs if the Project creates a demand in water supply that requires new or expanded entitlements or resources to assure continuation of sufficient water supply to the public.

Environmental Analysis: No Impact.

The Project requires no new water service and therefore avoids significant effect on water supplies, entitlements or resources.

Required Mitigation: None.

3.4.21-3. Would the Project 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? (CEQA XIXc)

<u>Standard of Significance</u>: A significant impact results if the project creates additional demand that prohibits STPUD from meeting existing provider commitments with existing wastewater treatment capacity.

Environmental Analysis: No Impact.

The Project requires no wastewater service.

Required Mitigation: None.

3.4.21-4. Would the Project 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? (CEQA XIXd)

<u>Standard of Significance</u>: Noncompliance with statutes and regulations regarding solid waste results in a significant impact as defined by TRPA Regional Plan Goals and Policies, the County General Plan and state (Title 14 and 27 CCR) and federal solid waste regulations.

Environmental Analysis: Less than Significant Impact.

The Project provides an alternative transportation route through the area and would not create solid waste. Existing waste disposal bins at Tahoe Paradise Park would serve trail users and no significant increase in trash would be generated. Construction would result in a temporary increase in solid waste generation; however, the quantity of solid waste would not cause an impact to collection, or capacity limits. Construction waste would be recycled to the extent feasible and would not interfere with waste reduction goals. Both the STR main facility and the Lockwood Regional Landfill have sufficient capacity to manage construction waste. Therefore, this impact is considered to be less than significant.

Required Mitigation: None.

3.4.21-5. Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (CEQA XIXe)

<u>Standard of Significance:</u> Construction of new solid waste systems or disposal sites constitutes a significant impact.

Environmental Analysis: No Impact.

The Lockwood Regional Landfill receives solid waste generated in the area and has sufficient capacity to serve the area well into the future. Existing resource recovery operations provide recycling of various

materials, including green waste and construction material, which further reduces the quantity of waste sent to the landfill pursuant to state law. Trail operation would not generate solid waste.

Required Mitigation: None.

3.4.21-6. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to power or natural gas? (TRPA 16a)

<u>Standard of Significance:</u> Substantial alteration to power or natural gas or the requirement for new systems by the Project results in a significant impact as defined by TRPA Regional Plan Conservation Element.

Environmental Analysis: No Impact.

See Question 3.4.8-3 above that concludes no impact would occur as no facilities that utilize power are proposed.

Required Mitigation: None.

3.4.21-7. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to communication systems? (TRPA 16b)

<u>Standard of Significance:</u> The need for new systems or substantial alteration to communication systems as a result of the Project constitutes a significant impact.

Environmental Analysis: No Impact.

Project construction and operation has no effect on demand for communication service as no increase in population, housing, or commercial units results from the Project. The Project includes no new communication facilities. Communication lines within the project area are above ground on existing utility poles and will not be removed or altered.

Required Mitigation: None.

3.4.21-8. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to utilize additional water which amount will exceed the maximum permitted capacity of the service provider? (TRPA 16c)

<u>Standard of Significance:</u> Construction of new water facilities or expansion of existing facilities as a result of the Project constitutes a significant impact if new construction creates significant and immitigable environmental effects.

Environmental Analysis: No Impact.

See Questions 3.4.21-1 and 3.4.21-2 above that conclude the Project creates no impacts. The Project creates no demand to water or wastewater systems requiring alterations to existing systems.

3.4.21-9. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider? (TRPA 16d)

<u>Standard of Significance:</u> Construction of new wastewater facilities or expansion of existing facilities as a result of the Project constitutes a significant impact if new construction creates significant and immitigable environmental effects.

Environmental Analysis: No Impact.

See Questions 3.4.21-1 and 3.4.21-3 above, which conclude that the Project creates no impact to wastewater systems. The Project creates no demand to wastewater systems requiring alterations to sewage systems

Required Mitigation: None.

3.4.21-10. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to storm water drainage? (TRPA 16e)

<u>Standard of Significance:</u> Construction of new stormwater drainage facilities or expansion of existing facilities as a result of the Project constitutes a significant impact if new construction creates significant and immitigable environmental effects.

Environmental Analysis: No Impact.

See discussion and analysis for Question 3.4.21-1 above. The Project proposes improvements to existing Culvert 1 near Bakersfield Street. These improvements would correct an existing deficiency in which an eroded channel has formed, causing sedimentation and inadequate management of runoff. The majority of the Project merely restripes existing pavement to create a bike route. The new Class 1 portion of the project includes additional paved areas; however, a vegetated drainage channel would parallel the path to collect runoff.

Required Mitigation: None.

3.4.21-11. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to solid waste and disposal? (TRPA 16f)

<u>Standard of Significance:</u> Construction of new solid waste systems or disposal sites constitutes a significant impact.

Environmental Analysis: No Impact.

Large quantities of trash will not be generated because the Project serves as a transportation route with primarily through-travel users and, the Project does not require the development of new landfills. Therefore, new collection equipment, personnel, or infrastructure is not needed. However, a receptacle should be located near the trail to avoid the accumulation of debris along the trail

3.4.22 Wildfire (CEQA)

This section presents the analysis for potential impacts related to wildfire. Table 3.4.22-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.22-1: Wildfire				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Is the Project located in or near state Yes: X No:	responsibility areas	or lands classified	as high fire hazard seve	erity zones?
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
3.4.22-1. Substantially impair an adopted emergency response plan or emergency evacuation plan? (CEQA XXa)				X
3.4.22-2. 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? (CEQA XXb)			Х	
3.4.22-3. Require the installation 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? (CEQA XXc)			X	
3.4.22-4. 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? (CEQA XXd)				X

Environmental Setting

Portions of the Project area, outside LTBMU-managed lands, are located within the Very High Hazard State Responsibility Area (CalFire, 2020). CalFire mapping does not indicate that the Project area is within a local responsibility area but does identify areas of Federal responsibility. The LTBMU Forest Plan Wildland Urban Interface (WUI) map indicates the Project area is located within the Defense Zone of the Wildland Urban Interface. The Forest Plan includes direction for operations within the WUI, although mostly in relation to USFS actions to manage vegetation and habitat in the area, rather than in relation to projects and facilities. The following direction and standards are applicable:

DC25. Unplanned fires in the Wildland-Urban Interface (WUI) and in Jeffrey pine/mixed conifer forests tend to spread slowly to moderately, depending on winds, and burn as a surface fire. Occasional single- tree or group torching might occur when the fire burns through a dense clump of young trees. This burning thins the stand, promotes rapid growth of surviving trees, and creates occasional large snags by killing adjacent large trees. Unplanned fires occurring outside of the WUI in densely stocked fir or lodgepole pine forests may produce intense, stand-replacing events consistent with natural fire regimes.

DC26. WUI zones (Map 7), are open canopied and dominated primarily by larger, fire-tolerant trees (e.g., thick-barked, self-pruning pine species). The WUI incorporates patterns of fuel condition that modify wildfire behavior by slowing large fire spread and reducing overall fire intensity and severity. Defensible space exists for all structures on Forest Service administrative sites, Forest Service permit authorization sites, and within 100 feet of non-federal structures.

SG27. Suppress all unplanned ignitions in the WUI defense zone. [Standard]

Environmental Analysis and Mitigation Measures

3.4.22-1. Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan? (CEQA XXa)

<u>Standard of Significance:</u> A significant impact occurs if the project conflicts with or interferes with the implementation of an emergency response or evacuation plan.

Environmental Analysis: No Impact.

See discussion and analysis for Questions 3.4.11-6, 3.4.11-9, and 3.4.17-1 above that conclude that the Project would not interfere with an adopted emergency response or evacuation plan. Development of the trail improves access and connection between existing neighborhoods currently disconnected by the Upper Truckee River. While the trail would not serve as a new vehicle route for personal automotive use, the trail may be used in some situations for emergency vehicle access and would serve as an evacuation resource for persons on bicycle or on foot. The project has the potential to be beneficial in emergency situations.

Required Mitigation: None.

3.4.22-2. Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (CEQA XXb)

<u>Standard of Significance:</u> A significant impact occurs if Project activities or components or the location of the project have the capability of increasing wildfire risk.

Environmental Analysis: Less than Significant Impact.

The Project would not be located on steep slopes and does not propose structures that would be occupied by people. Development and use of a trail would not increase wildfire risk to the area. The presence of the trail may aid in firefighting efforts by improving access and serving as a fire break. Therefore, no significant impact would occur.

Required Mitigation: None.

3.4.22-3. Would the Project require the installation 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? (CEQA XXc)

<u>Standard of Significance:</u> A significant impact occurs if the project extends required infrastructure into areas of high fire risk such that the fire risk level increases or causes additional environmental impact.

Environmental Analysis: Less than Significant Impact.

See discussion and analysis for Question 3.4.22-2 above. The Project is a transportation route for nonmotorized transportation types such as bicycles and pedestrians. Therefore, the Project itself would install a transportation route within a high fire hazard area; however, no associated infrastructure is proposed. There are existing overhead utility lines along the project alignment, as well as water infrastructure (water lines and fire hydrants).

The new Class 1 trail would pave an existing dirt utility road, thereby reducing wildfire risk of emergency vehicles driving across vegetated areas. Construction of the trail would involve the use of heavy machinery and vegetation removal; however, all equipment would include spark arrestors, fire extinguishers would be located on heavy equipment to control any sparks, and other best management practices would be implemented as discussed in the Project Description. The risk of wildfire associate with use of the trail would not increase above existing conditions.

Required Mitigation: None.

3.4.22-4. 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? (CEQA XXd)

<u>Standard of Significance</u>: A significant impact occurs if, after a wildfire, the Project would expose persons to flooding or landslides due to slope instability and alteration to drainage patterns.

Environmental Analysis: No Impact.

See discussion and analysis for Questions 3.4.9-1, 3.4.9-8, 3.4.9-11, 3.4.9-13, and 3.4.12-3 above. The Project does not propose residences or alteration to the landscape so as to cause flooding or landslides that may affect existing residences in the area. The Project would not significantly alter drainage patterns and proposes drainage improvements in the area to address existing drainage insufficiencies.

3.4.23 Mandatory Findings of Significance

This section presents the analyses for mandatory findings of significance. Table 3.4.23-1 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 3.4.23-1: Mandatory Findings of Significance					
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact	
3.4.23-1. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory? (CEQA XXIa)		Х			
3.4.23-2. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (CEQA XXIb)		Х			
3.4.23-3. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (CEQA XXIc)			X		
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No	
3.4.23-4. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-		X			

sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory? (TRPA 21a)		
3.4.23-5. Does the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.) (TRPA 21b)		X
3.4.23-6. Does the Project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?) (TRPA 21c)	Х	
3.4.23-7. Does the Project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly? (TRPA 21d)		X

Environmental Analysis and Mitigation Measures

3.4.23-1. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory? (CEQA XXIa)

<u>Standard of Significance:</u> Refer to standards defined for Biological Resources checklist items in Section 3.4.6.

Environmental Analysis: Less than Significant Impact with Mitigation Measures

The Project proposes a new bike trail across the Upper Truckee River in the location of an existing dirt utility road. While the trail structures would be located outside the river channel, avoiding impacts to aquatic species and aquatic habitat, project construction may affect protected nesting avian species.

Impacts to protected nesting avian species are mitigated through pre-construction surveys and nest avoidance, if present (Mitigation Measure BIO-1).

Although the trail does not affect riparian habitat or enter the river channel, the alignment is located within a Stream Environment Zone. The TRPA and Lahontan generally prohibit new SEZ disturbance, but TRPA will allow an exemption for shared-use trails (TRPA Code Section 30.4.6.D.3) if findings can be made. As disclosed in Question 3.4.6-2, the proposed alignment is the most direct route and utilizes an existing disturbed utility road to minimize new impacts. The project also includes bridge and boardwalk components to avoid disturbance to surface flows and habitat. Similarly, Lahontan may grant an exemption for trails if findings can be made, including no feasible alternatives that avoid the SEZ. Since the Upper Truckee River divides the community, there are no feasible alternatives to avoid crossing it and the SEZ surrounding it. As part of the exemption, Lahontan requires that the SEZ is restored in a 1.5:1 ratio of the project disturbance. Mitigation Measure BIO-2 would implement this restoration of 0.45 acre (19,620 square feet) in conjunction with coordination between the County and Lahontan.

As discussed in Question 3.4.6-3 an existing culvert within a potentially jurisdictional feature along East San Bernardino Avenue near Bakersfield Street may require replacement in order to provide for drainage functionality and protect the trail from existing stormwater facility deficiencies. Mitigation Measure BIO-3 requires Section 404 and Section 401 permitting, including Section 1602. Compliance with the permit measures ensure these waters and associated habitat are protected.

No rare, threatened, or endangered species would be affected by the Project.

As discussed in Section 3.4.7, no cultural, historical, and archaeological resources would be affected by the Project. Should an inadvertent discovery occur, the Project would implement the regulatory compliance measures listed in Section 2.6.3 to protect unknown resources.

The Project achieves environmental improvement and maintains environmental threshold carrying capacities. Since no changes to existing policies regarding habitats, special status plant or animal communities, or to cultural, historical, and archeological resources are proposed, and federal, state, and TRPA protections are already in place, implementation of the Project would not result in the degradation of these resources. Overall, the Project would result in beneficial impacts to the environment by replacing vehicle trips with non-polluting and non-energy consuming pedestrian and bicycle trips. This action improves air quality, traffic, noise levels, and access to recreation and other public services. The Project would also improve accessibility and safety for the Lake Tahoe Environmental Science Magnet School.

Required Mitigation: See Mitigation Measures for biological and geology resources including:

BIO-1: Pre-Construction Avian Survey

BIO-2: Section 404/401 Permit Compliance

GEO-1: SEZ Restoration Credit for New Trail Disturbance

3.4.23-2. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (CEQA XXIb)

<u>Standard of Significance:</u> When the Project's incremental contribution is "cumulatively considerable", the following analysis addresses the environmental resource of concern. The projects that could have a cumulative impact on the resources in the project area when considered incrementally with the Project are referred to as "related projects".

Environmental Analysis: Less than Significant Impact with Mitigation.

The Project contributes to cumulatively considerable beneficial impacts by reducing air and greenhouse gas emissions, noise levels, and individual vehicle trips. The trail also addresses existing erosion and sedimentation issues that occur at the Upper Truckee River as a result of the use of a dirt utility road located on each side of the river. Since SEZ restoration would occur, the impact of placing the trail within the SEZ would be mitigated through restoration credits. As discussed in Question 3.4.23-1, impacts to biological resources are avoided through design or are mitigated. Tree removal would occur but would not contribute to a cumulative impact. The areas disturbed by the project would be revegetated. Additionally, the Project would not affect historic or cultural sites or resources. The Project would locate a bridge structure across the river, altering existing views; however, Mitigation Measure VIS-1 would be implemented to better blend the man-made structure in with the surrounding landscape.

The Tahoe Paradise Recreation and Park District are in the initial planning stages for potential improvements to Park facilities including improvements to the clubhouse, courts and playground, enhanced ball fields and picnic area, and new facilities (e.g., ADA loop trail around Lake Baron, pavilion near the picnic area, and restroom across from the clubhouse). Neither of the proposed facility improvements or expansions would be visible from the location of the proposed shared-use pathway crossing of the Upper Truckee River. Because erosion control projects would be the only improvements visible at the location of the proposed river crossing, Park improvements would not result in cumulatively significant impacts to the landscape/scenic quality and would contribute to a cumulatively beneficial impact. Besides ongoing maintenance of existing Park facilities, proposed Park improvements and facilities, and the identification of necessary restoration of erosion along the banks of the Upper Truckee River, no other cumulative effects are anticipated in the vicinity of the Project.

Required Mitigation: See Mitigation Measures for biological, geology and scenic resources including:

BIO-1: Pre-Construction Avian Survey BIO-2: Section 404/401 Permit Compliance GEO-1: SEZ Restoration Credit for New Trail Disturbance VIS-1: Bridge Design Elements

3.4.23-3. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (CEQA XIXc)

<u>Standard of Significance:</u> Project environmental effects that cause direct or indirect substantial adverse effects to humans create a significant impact.

Environmental Analysis: Less than Significant Impact.

As discussed in this IS/IEC, the Project would result in no significant effects related to air quality, noise, or hazards that would adversely affect humans. The bike trail connection between West and East San Bernardino Avenue will positively affect humans through improvement of the non–automobile transportation network, providing safer and more convenient alternatives to the automobile.

Required Mitigation: None.

3.4.23-4. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or

endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory? (TRPA 21a)

Standard of Significance: See Question 3.4.23-1

Environmental Analysis: No, with mitigation.

Question 3.4.23-1 concludes implementation of the proposed amendments would not degrade the quality of the environment, reduce habitat of a fish population, threaten or eliminate a plant or animal community or eliminate important examples of a major period of California or Nevada history or prehistory.

Required Mitigation: See Mitigation Measures for biological and geology resources including:

BIO-1: Pre-Construction Avian Survey **BIO-2:** Section 404/401 Permit Compliance **GEO-1:** SEZ Restoration Credit for New Trail Disturbance

3.4.23-5. Does the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (TRPA 21b)

<u>Standard of Significance:</u> A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.

Environmental Analysis: No Impact.

The Project includes additional development in sensitive soils and vegetation communities that cannot be avoided based on the linear nature of the transportation facility. The Project also provides opportunity for the permanent protection and restoration (approximately 19,620 square feet) of SEZ lands. The success of new SEZ restoration may not be known in the short-term if new restoration is performed in the project vicinity. However, with monitoring and management strategies, the project has the potential to achieve long-term environmental goals through an overall reduction in disturbance of sensitive vegetation communities and soils.

Required Mitigation: None.

3.4.23-6. Does the Project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?) (TRPA 21c)

<u>Standard of Significance:</u> When the Project's incremental contribution is "cumulatively considerable" the following analysis addresses the environmental resource of concern. The projects that could have a cumulative impact on the resources in the project area when considered incrementally with the Project are referred to as "related projects."

Environmental Analysis: No with Mitigation.

Refer to the analysis for Question 3.4.23-2, which addresses CEQA checklist Item XXIb and concludes the level of impact is less than significant with mitigation.

Required Mitigation: See Mitigation Measures for biological, geology and scenic resources including:

BIO-1: Pre-Construction Avian Survey BIO-2: Section 404/401 Permit Compliance GEO-1: SEZ Restoration Credit for New Trail Disturbance VIS-1: Bridge Design Elements

3.4.23-7. Does the Project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly? (TRPA 21d)

<u>Standard of Significance:</u> Project environmental effects that cause direct or indirect substantial adverse effects to humans create a significant impact

Environmental Analysis: No Impact.

Refer to the analysis for Question 3.4.23-3, which addresses CEQA checklist Item XIXc and concludes the level of impact is less than significant.

Required Mitigation: None.

3.5 CERTIFICATION [TRPA ONLY]

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Tahoe Regional Planning Agency

Date

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